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DENVER 2, COLORADO

ANNUAL REPORT

for the Year

1955



WALTER E. SCOTT, JR.
Commissioner of Mines

Publication Approved by James A. Hansen, State Controller

PRINTED BY THE COLORADO STATE PRINTING HOUSE

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BRADFORD-ROBINSON PRINTING CO., DENVER

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LETTER OF TRANSMITTAL

June 1st, 1956

Honorable Edwin C. Johnson
Governor of Colorado
State Capitol Building
Denver 2, Colorado

Dear Governor Johnson:

In compliance with the requirements of the law, Chapter 92, Article 32, Section 11 of the Colorado Revised Statutes 1953, I have the honor to transmit herewith the Report of the State Bureau of Mines for the year 1955.

Respectfully submitted,

WALTER E. SCOTT, JR.
Commissioner of Mines



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PERSONNEL OF THE COLORADO BUREAU OF MINES 1955

WALTER E. SCOTT, JR., Commissioner of Mines.....	Central City
G. A. (BUD) FRANZ, JR., Deputy Commissioner.....	Denver
NORMAN R. BLAKE, Inspector, District No. 1.....	Black Hawk
FRED E. THEOBALD, Inspector, District No. 2.....	Canon City
JOHN W. DOYLE, Inspector, District No. 3.....	Leadville
ELZIE D. RAY, Inspector, District No. 4.....	Montrose
JOSEPH L. KEATING, Deputy Inspector.....	Leadville
JOHN H. PAKKA, Deputy Inspector.....	Telluride
RICHARD C. GROOM, Associate Curator.....	Denver
MARGARET G. LAWRENCE, Office Secretary.....	Denver
THELMA L. MacMANUS, Accidents & Statistics.....	Denver
NAOMI S. JONES, Information & Records.....	Denver

DISTRICTS OF INSPECTION

COLORADO BUREAU OF MINES

DISTRICT NO. 1, all of the following counties: Adams, Arapahoe, Boulder, Cheyenne, Clear Creek, Denver, Gilpin, Jefferson, Kit Carson, Larimer, Logan, Morgan, Phillips, Sedgwick, Washington, Weld, and Yuma.

DISTRICT NO. 2, all of the following counties: Baca, Bent, Crowley, Custer, Douglas, Elbert, El Paso, Fremont, Huerfano, Kiowa, Las Animas, Lincoln, Otero, Park, Prowers, Pueblo and Teller.

DISTRICT NO. 3, all of the following counties: Alamosa, Chaffee, Conejos, Costilla, Eagle, Garfield, Grand, Jackson, Lake, Mineral, Moffat, Pitkin, Rio Blanco, Rio Grande, Routt, Summit, and that part of Gunnison County in the extreme northwest corner and lying north of the 39th degree of latitude, and that part of Saguache County lying south and east of the Continental Divide.

DISTRICT NO. 4, all of the following counties: Archuleta, Delta, Dolores, Hinsdale, La Plata, Mesa, Montezuma, Montrose, Ouray, San Juan, San Miguel and Gunnison County, except the extreme northwest corner lying north of the 39th degree of latitude and that part of Saguache County lying north and west of the Continental Divide.

COMMISSIONERS OF MINES

HARRY A. LEE.....	May 11, 1895—May 10, 1903
E. L. WHITE.....	May 10, 1903—May 10, 1907
T. J. DALZELL.....	May 10, 1907—May 10, 1911
T. R. HENAHEN.....	May 10, 1911—May 10, 1915
FRED CARROLL.....	May 10, 1915—May 10, 1919
HORACE F. LUNT.....	June 1, 1919—June 1, 1923
JOHN T. JOYCE.....	June 1, 1923—June 12, 1939
EDWARD P. ARTHUR.....	June 12, 1939—August 26, 1943
FRED JONES.....	September 27, 1943—April 25, 1950
WALTER E. SCOTT, JR.....	May 3, 1950

PUBLICATIONS OF THE BUREAU OF MINES

BULLETINS

- Bulletin No. 1, Recommendations for Safety Appliance in Mining, Harry A. Lee, Commissioner of Mines, 1896.
- Bulletin No. 2, Precious Metal Production for the Year 1898, Harry A. Lee, Commissioner of Mines, 1899.
- Bulletin No. 3, Mining Laws, Relative to Bureau of Mines Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1899.
- Bulletin No. 4, Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1901.
- Bulletin No. 5, Precious Metal Production, Harry A. Lee, Commissioner of Mines, 1902.
- Bulletin No. 6, Regulations Relative to the Construction, Equipment and Operation of Metalliferous Mines, Mills and Metallurgical Plants, Recommendations and Mineral Production for 1905, E. L. White, Commissioner of Mines, 1906.
- Bulletin No. 7, Federal and State Laws Relating to Mining, Fred Carroll, Commissioner of Mines, 1916.
- Supplement to Bulletin No. 7, Mining Laws Enacted by the Twenty-first General Assembly, Fred Carroll, Commissioner of Mines, 1917.
- Supplement No. 2 to Bulletin No. 7, Amendments to the Mining Laws Enacted by the Twenty-second General Assembly, Horace F. Lunt, Commissioner of Mines, 1919.
- Supplement No. 3 to Bulletin No. 7, Amendments to Laws Relating to Mining Enacted by the Twenty-third General Assembly, Horace F. Lunt, Commissioner of Mines, 1921.
- Supplement No. 4 to Bulletin No. 7, Amendments to Laws Relating to Mining Enacted by the Twenty-fourth General Assembly, Horace F. Lunt, Commissioner of Mines, 1923.
- Bulletin No. 8, The Oil Shales of Northwestern Colorado, Horace F. Lunt, Commissioner of Mines, 1919.
- Bulletin No. 9, Mine Safety Standards, Horace F. Lunt, Commissioner of Mines, 1920. Out of print, now embraced in Bulletin No. 11.
- Bulletin No. 11, Federal and State Laws Relating to Mining, John T. Joyce, Commissioner of Mines, 1931.
- Bulletin No. 12, Mining Laws of Colorado, Edward P. Arthur, Commissioner of Mines, 1942.
- Bulletin No. 13, Mining Laws of Colorado, Fred Jones, Commissioner of Mines, 1946.
- Bulletin No. 14, Mining Laws of Colorado, Fred Jones, Commissioner of Mines, 1949.
- Bulletin No. 15, Oil Well Safety Laws, Walter E. Scott, Jr., Commissioner of Mines, 1953.
- Circular No. 1, Location of Lode and Placer Mining Claims, Walter E. Scott, Jr., Commissioner of Mines, 1953.
- Bulletin No. 16, Colorado Mining Laws with Rules and Regulations, Walter E. Scott, Jr., Commissioner of Mines, 1954.

REPORTS

- Report of Bureau of Mines, Colorado, from its establishment in May, 1895, to November 30, 1896, Harry A. Lee, Commissioner of Mines, 1896.
- Report for the Year 1897, Harry A. Lee, Commissioner of Mines, 1898.
- Report for the Year 1898, Harry A. Lee, Commissioner of Mines, 1899.
- Biennial Report for the Years 1899-1900, Harry A. Lee, Commissioner of Mines, 1900.
- Biennial Report for the Years 1901-1902, Harry A. Lee, Commissioner of Mines, 1903.
- Biennial Report for the Years 1903-1904, E. L. White, Commissioner of Mines, 1905.
- Biennial Report for the Years 1905-1906, E. L. White, Commissioner of Mines, 1907.
- Biennial Report for the Years 1907-1908, T. J. Dalzell, Commissioner of Mines, 1909.
- Biennial Report for the Years 1909-1910, T. J. Dalzell, Commissioner of Mines, 1911.
- Biennial Report for the Years 1911-1912, T. R. Henahen, Commissioner of Mines, 1913.
- Biennial Report for the Years 1913-1914, T. R. Henahen, Commissioner of Mines, 1914.
- Biennial Report for the Years 1915-1916, Fred Carroll, Commissioner of Mines, 1916.
- Biennial Report for the Years 1917-1918, Fred Carroll, Commissioner of Mines, 1919.
- Annual Report for the Year 1919, Horace F. Lunt, Commissioner of Mines, 1920.
- Annual Report for the Year 1920, Horace F. Lunt, Commissioner of Mines, 1921.
- Annual Report for the Year 1921, Horace F. Lunt, Commissioner of Mines, 1922.
- Annual Report for the Year 1922, Horace F. Lunt, Commissioner of Mines, 1923.
- Annual Report for the Year 1923, John T. Joyce, Commissioner of Mines, 1924.
- Annual Report for the Year 1924, John T. Joyce, Commissioner of Mines, 1925.
- Annual Report for the Year 1925 was fully prepared but, because of lack of funds, was not printed. The manuscript is on file in the office of the State Bureau of Mines.
- Annual Report for the Year 1926, John T. Joyce, Commissioner of Mines, 1927.
- Annual Report for the Year 1927, John T. Joyce, Commissioner of Mines, 1928.

- Annual Report for the Year 1928, John T. Joyce, Commissioner of Mines, 1929.
- Annual Report for the Year 1929, John T. Joyce, Commissioner of Mines, 1930.
- Annual Report for the Year 1930, John T. Joyce, Commissioner of Mines, 1931.
- Annual Report for the Year 1931, John T. Joyce, Commissioner of Mines, 1932.
- Annual Report for the Year 1932, John T. Joyce, Commissioner of Mines, 1933.
- Annual Report for the Year 1933, John T. Joyce, Commissioner of Mines, 1934.
- Annual Report for the Year 1934, John T. Joyce, Commissioner of Mines, 1935.
- Annual Report for the Year 1935, John T. Joyce, Commissioner of Mines, 1936.
- Owing to lack of funds the 1936 Annual Report of the State Bureau of Mines was not published.
- Annual Report for the year 1937, John T. Joyce, Commissioner of Mines, 1938.
- Owing to lack of funds the 1938 Annual Report of the State Bureau of Mines was not published.
- Annual Report for the Year 1939, Edward P. Arthur, Commissioner of Mines, 1940.
- Annual Report for the Year 1941, Edward P. Arthur, Commissioner of Mines, 1942.
- Annual Report for the Years 1942 and 1943, Fred Jones, Commissioner of Mines, 1944.
- List of Mines for the Year 1944, Fred Jones, Commissioner of Mines, 1945.
- List of Mines for the Year 1945, Fred Jones, Commissioner of Mines, 1946.
- Annual Report for the Year 1946, Fred Jones, Commissioner of Mines, 1947.
- Annual Report for the Year 1947, Fred Jones, Commissioner of Mines, 1948.
- Annual Report for 1948 was not published.
- Annual Report for the Year 1949, Walter E. Scott, Jr., Commissioner of Mines, 1950.
- Annual Report for the Years 1950 and 1951, Walter E. Scott, Jr., Commissioner of Mines, 1952.
- Annual Report for the Year 1952, Walter E. Scott, Jr., Commissioner of Mines, 1953.
- Annual Report for the Year 1953, Walter E. Scott, Jr., Commissioner of Mines, 1954.
- Annual Report for the Year 1954, Walter E. Scott, Jr., Commissioner of Mines, 1955.

FOREWORD

The Bureau of Mines of the State of Colorado was established by an Act of the Tenth General Assembly and approved March 30, 1895. The Bureau of Mines Law established the office of Commissioner of Mines which had been authorized by the Colorado State Constitution in 1876 (Article 16, Section 1), and charged the Commissioner of Mines, among other things, with the supervision of Metal Mine Inspection and the enforcement of laws relative to health and safety in Metal Mines. Subsequently, this Act was broadened to include "any ore mill, sampling works, smelter, metallurgical plant, rock quarry, clay pit, and rock excavations, tunnels, or mine workings of whatever kind or character, except coal mines".

The Thirty-sixth General Assembly in 1947 passed an Act requiring, in addition to the above, that the Commissioner of Mines conduct safety inspection of all oil wells, property and equipment appurtenant immediately and used in connection with producing oil wells and further charged him with the enforcement of laws relating to the health, safety and welfare of any person employed in such wells, or other property.

From time to time, and by various opinions and decisions, the Colorado Bureau of Mines, under the direction of the Commissioner of Mines, has been authorized and empowered to make safety inspections of all underground metal or mineral mines, open pit or other surface mines, rock and mineral quarries, clay pits and mines, earth and rock dams, water canals, highway excavations, highway gravel pits, all rock excavations, rock tunnels or any mine workings of whatever kind or character (except coal mines), ore mills, mineral grinding plants, highway gravel crushing plants, sampling works, smelters, chemical plants producing a chemical from ore or minerals, metallurgical plants, oil and gas wells and all equipment and machinery used in connection with any of the above and all buildings thereon.

The Commissioner of Mines was authorized to make such rules and regulations as may be necessary for carrying out provisions of safety, and he has further been charged with the enforcement of laws relating to the health, life, safety and welfare of all persons employed in any of the above mentioned categories. The Commissioner, upon receipt of reliable information indicating any condition that might be injurious or dangerous to the health or safety of workmen employed in these places, or any time when he deems it necessary, makes inspections or has inspections made by the inspectors of the Bureau of Mines who report to him on any unsafe condition or unsafe practice. Whenever possible, all accidents are inquired into and a record is kept giving complete information concerning accidents. All fatal accidents are promptly inquired into by an inspector and a complete written report, made to the Commissioner of Mines, becomes a part of the records of the Bureau of Mines.

The Bureau of Mines is required to disseminate such information concerning mining and minerals as may be required by the public, and when he has opportunity and means, the Commissioner of Mines is charged with collecting and preserving mineral specimens and accumulating technical and other data relating to mining, metallurgical processes and geology. He is also required to examine, report on and record the geological formation of important mining districts or mining areas.

The Commissioner of Mines has authority to undertake any research project which would be of assistance to those engaged in mining or which in any way would help to develop the mineral resources of Colorado. He is charged with the responsibility of making investigations regarding prospecting, buying, selling, transporting, treating and reducing ores and minerals, and of recording the progress of the mineral industry providing, of course, that he has means therefore to do so.

The Commissioner of Mines may, from time to time, with the consent of the Governor, compile, publish and distribute bulletins on subjects, districts and counties. When considering a county or a district, the report shall give in detail the history of the locality, the geology, the record of mines and mills, the processes of treatment with results, and shall classify and locate mining property and prospects, together with maps of the same, provided, of course, that there are appropriations for such work.

The first and foremost function of the Colorado Bureau of Mines is Safety Inspection. By inspections and investigations consistent efforts are made to see that safe methods and safe practices are used to protect the health, life, safety and welfare of all persons employed in the mineral and other industries under the jurisdiction of the Bureau. Each year the safety record of these industries has improved and for the past several years both the frequency rate and the severity have been greatly reduced. Both the Inspectors of this Bureau and the Operators are to be congratulated for this splendid record, the inspectors for their efforts to instill safety ideas and the operators for their active cooperation.

During the past year arrangements were completed with the Colorado State Department of Public Health whereby two technicians of their Occupational Health Section are to act as Deputy Inspectors and the Bureau of Mines can now take and have analyses made of any dust or gas samples, including radon gas.

The Bureau of Mines has in its custody one of the very finest mineral collections in existence. In addition to the specimens from all over the world, one of the most unusual features of this collection is the fact that it contains specimens of ore from all of the great mines of Colorado. While the collection is visited annually by thousands of tourists, it continues to be of much interest and concern to prospectors, miners, engineers, geologists and persons

genuinely interested in Colorado's mineral industry. Foreign engineers and geologists have been most enthusiastic about the Colorado collection.

On Thursday, September 15th, 1955, at 6:30 p.m., the Colorado Bureau of Mines was requested to take charge of a rescue operation involving Glenn Dew and Melvin LeBlow who were reported to be long overdue in emerging from the Marshall & Russell Tunnel near Lawson, Colorado. Preliminary investigation determined that the two men were in unlivable air with an inadequate supply of oxygen and breathing equipment which at the time of notification was exhausted. Volunteer help from the county and immediate area and equipment from Climax and Leadville was enlisted and fresh air was forced into the tunnel for a distance of 5000 feet, using a 600 cfm compressor and fire hose. At this point a rescue team from Gilman, Colorado, wearing McKaa breathing apparatus, advanced to the 6200 foot station where the two men were found. The entire operation required eighty-two hours and was accomplished entirely with donated labor and equipment. Atmosphere in the tunnel would not sustain life and the two amateur prospectors were entirely uninformed of the great danger confronting them. The Colorado Bureau of Mines wishes to thank the United States Bureau of Mines personnel and all others who contributed to this rescue operation.

Advice and information is freely given to prospectors and small operators in order to further the State's mineral development but no written reports on mines are made and care is taken not to encroach on the proper field of consulting engineers and geologists.

Much of the work of the Bureau of Mines, including this report, would not be possible if it were not for the generous cooperation of other State departments and Federal agencies. It is impossible for us to thank individually the State and Federal agencies and the persons therein to whom we are indebted, but we are most grateful to all who have been so helpful.

The compiling and preparations of this report have been the work of the entire staff of the Bureau, including the inspectors who furnished much of the data concerning their districts. Each and every member of the staff are to be congratulated and thanked for their most generous cooperation and help.

Every effort has been made to assure accuracy and completeness of the data used in the report but changes, due to removal and altered mining conditions, are constantly taking place which may cause some omissions or mistakes to appear in the publication. It will be most appreciated if any additions, corrections or errors are brought to the attention of the Colorado Bureau of Mines.

The publication of this report is authorized by Chapter 92, Article 32, Section 11, of the Colorado Revised Statutes, 1953.

MINERALS IN 1955

Colorado's mineral production in 1955 again surpassed production of the preceding year. Total valuation to the State of metallic and non-metallic minerals, petroleum, sand and gravel for 1955 was \$381,709,013. This exceeded the 1954 production by \$44,495,562 and established an all-time high for mineral output. Where gold, silver, lead and zinc were formerly the principal metals produced in Colorado, the State now enjoys increased production of many other metals and minerals such as uranium, tungsten, molybdenum, and of the so-called rare minerals and rare earths. Production of gold, silver, lead, copper and some other metals was less in 1955 but, due to increased prices for lead, zinc, and copper, the dollar value decrease was less than one percent. Production of non-metallies increased over nine percent in 1955 and these increases were noted in clay, gypsum, cement, sand and gravel, and many other non-metallic minerals. The natural mineral resources of Colorado are unlimited and as new markets and uses are developed for our great variety of minerals, the State may expect a continued increase in production.

The production figures given in this report are as accurate as we believe possible to get under existing conditions. Production of gold, silver, copper, lead and zinc was furnished by the Metal Statistics Office of the Mineral Industry Division, Region III, of the United States Bureau of Mines. Information on other metals and minerals was also given by the United States Bureau of Mines. Crude oil and gas production figures in barrels and cubic feet were provided by the Colorado Oil and Gas Conservation Commission. The dollar value of this production was calculated by this office. Production figures of some metals and minerals are reported to no other agency and consequently, part of the production which we show is from the records of the Colorado Bureau of Mines and was obtained directly from mine operators.

Most important to the nation and certainly very important to Colorado is the uranium production. This industry has grown from a minor figure in 1948 to the most important and most valuable mineral in 1955. Countless numbers of new discoveries on the Colorado section of the Colorado Plateau, as well as new discoveries in other areas of the State, will, no doubt, keep Colorado high on the list of uranium producing states. During 1955 new discoveries in Gunnison, Jackson, Jefferson, Gilpin, Clear Creek, Saguache, Boulder, and Larimer Counties have gone into production and this, added to the steady production on the Plateau, assures Colorado increased and continued mining activity in the uranium industry.

No actual production is released on uranium as this is restricted by the Atomic Energy Commission. In 1950 we started using a formula from which we thought it possible to determine the importance of uranium to Colorado's economy and since that

time we have continued using this same formula. While the figures we release can in no way give aid or comfort to an enemy, they do indicate the growth of Colorado's uranium industry.

The largest underground mine in North America and the second largest in the world, which is operated by Climax Molybdenum Company at Climax, Colorado, is the world's largest producer of molybdenum. Their production in 1955 averaged over 30,000 tons of ore per day. Present mill expansion is expected to increase this figure in 1956. Tungsten produced as a by-product at Climax proved to be the largest output in the State of this metal.

With the completion of Idarado's multimillion dollar expansion program in San Miguel County, the American Smelting & Refining Company's Keystone Plant at Crested Butte, and the new Creede Mill at Creede, along with continued high production at Gilman and Rico, Colorado, base and precious metal production should show an increase in 1956 over the declining figure of 1955.

The principal producing districts in the State of gold, silver, copper, lead and zinc were:

1. Eagle County
2. San Miguel County
3. Teller County
4. Lake County
5. Dolores County
6. Mineral County

The leading producers of gold, silver, copper, lead and zinc were:

GOLD	Golden Cycle Corporation Cripple Creek, Colorado
SILVER	Empire Zinc Division, The New Jersey Zinc Company Gilman, Colorado
COPPER	Empire Zinc Division, The New Jersey Zinc Company Gilman, Colorado
LEAD	Idarado Mining Company Ouray, Colorado
ZINC	Empire Zinc Division, The New Jersey Zinc Company Gilman, Colorado

The average price of the above metals in 1955 was: Gold, \$35.000 per ounce; Silver, \$0.9050 per ounce; Copper, \$0.370 per pound; Lead, \$0.149 per pound; Zinc, \$0.123 per pound.

Petroleum production in Colorado reached a new high of over \$153,000,000 in 1955. With the addition of thirty-four new fields in the State and the promise of more new discoveries, the petroleum industry in Colorado will, no doubt, continue to set new production records for many years.

The Rangely and Wilson Creek fields in Rio Blanco County, with a 1955 production of 26,413,865 barrels, continued to be first. The Adena field in Morgan County, with a production of 5,916,868 barrels, was second. The Little Beaver field in Washington County, with a production of 2,117,898 barrels, was third.

Colorado now has over 200 recognized oil and gas fields with wild cat drilling continuing generally over the State. Five oil refineries are located in Denver and two more are located at Alamosa and Rangely. A total of 1,539 wells were drilled in Colorado in 1955 at a cost of \$78,000,000. This in itself contributed considerably to Colorado's economy but does not appear in the petroleum valuation.

PRODUCTION OF METALS, NON-METALLICS.

PETROLEUM 1955

	Metals
Uranium (Mining and processing with Vanadium by-products—Value to State).....	\$121,000,000
Molybdenum	45,536,600
Zinc	8,708,000
Tungsten	4,500,000
Lead	4,723,000
Copper	3,182,000
Gold	3,157,000
Silver	2,534,000
Miscellaneous (Metals which can not be separated for production value).....	1,060,000
Pyrite	227,500
Iron	52,040
Tin	29,652
Beryllium	27,400
TOTAL	\$194,737,192

PRODUCTION OF METALS, NON-METALLICS, PETROLEUM
1955—Continued

	Non-Metallics
Alabaster	\$ 8,000
Calcium Phosphate.....	1,700
Columbium-Tantalum	10,000
Cement	12,328,000
Clays	1,190,000
Dolomite	149,978
Feldspar	379,050
Fluorspar	3,489,111
Gypsum	281,600
Lepidolite	12,200
Limestone	2,414,202
Marble (building).....	248,690
Mica	22,325
Peat	52,600
Perlite	693,000
Sand and Gravel.....	9,644,200
Silica Rock.....	35,960
Stone, Building.....	2,275,000
Stone, Crushed	131,338
Stone, Monumental.....	41,100
Turquoise	8,100
Volcanic Cinders.....	65,600
	<hr/>
TOTAL	\$ 33,482,836
Crude Oil.....	\$145,186,498
Gas, all classes (Well head value).....	8,302,487
	<hr/>
TOTAL	\$153,488,985
Metals	\$194,737,192
Non-Metallics	33,482,836
Oil and Gas.....	153,488,985
	<hr/>
TOTAL MINERAL PRODUCTION	\$381,709,013

COUNTY ACTIVITY AND PRODUCTION

ADAMS COUNTY (1)

Small amounts of gold and silver were recovered this year in Adams County from gravel plants along Clear Creek. Several oil wells have been drilled and prospecting for oil continues, with rising production for the county.

ARAPAHOE (1)

Sand and gravel plants in Arapahoe County continued their steady production during the year and considerable oil exploration has shown encouraging results.

ARCHULETA (4)

Uranium prospecting in Archuleta County continues with additional claims being located on both sides of the Piedra River. Oil production remains steady in the Chromo area with individual operators, as well as the Oriental Oil Company activities at Gramps Field. Several wild cat wells were drilled in the county during the year with indications of increased production of both gas and oil.

BACA (2)

Oil well drilling continued in Baca County with encouraging results. During 1955, more than twelve producing gas wells were reported.

BENT (2)

The first oil strike in Bent County was made in May of 1955 on the property of Elmer Cordes and the Oberlander brothers. This strike carried excellent indications that another producing field might be opened. Drilling activities were continuous in the county all during the year.

BOULDER (1)

Uranium prospecting activities have been added to the production of fluorspar and tungsten in Boulder County. With tungsten production from the Hetzer Mines, Inc., the Wah Chang Corporation, Cobb and Weldon and the Cold Springs Company, as well as many independent operators, Boulder County is second in the State in tungsten production. Production of fluorspar at the Burlington Mine, operated by the General Chemical Division of the Allied Chemical and Dye Corporation, has been increased during the year and their plant at Valmont has been operated at full capacity. Harry M. Williamson and his operations at Jamestown have milled ore at the Ozark-Mahoning mill located at Jamestown. These two fluorspar producers make Boulder County rank high in the State in the production of fluorspar.

CHAFFEE (3)

Several hundred uranium claims were filed in Chaffee County in the area of Trout Creek Pass and Ute Trail, but to date there has been no production. The D. & J. Uranium & Exploration Company operated in the Marshall Pass area, and the Pilgrim group of mines located on Taylor Mountain operated a short period of time during the year. Western Feldspar Mill operated throughout the year with production coming from the M. & S. Homestake Mine. The Monarch Quarry and Crushing Plant of the C. F. & I. continued to ship large tonnages of limestone to their steel plant at Pueblo. A considerable amount of exploration work was done at the Silver King Mine, and the Humpy Quarry produced several tons of terrazzo chips. Exploration was continued on the MacKeen claims and the Stonewall Mine at Hancock shipped ore during the summer months. The Josephine Lode was operated intermittently with no production reported. Chaffee County can expect an increase in exploration activities during 1956.

CLEAR CREEK (1)

With the excitement of uranium prospecting and development in Clear Creek County during the year, new deposits of gold and silver have been opened and older deposits further explored. Some fourteen properties have been actively engaged in production this year, shipping and milling gold, silver, lead and zinc ores, with some production in uranium. It is reported that the Chrysler Corporation and General Motors have become interested in the Marshall & Russell and the Red Elephant properties, which indicates that some larger companies may be considering some exploration and development of the area. The Marshall & Russell Tunnel was the scene of the recent tragedy in Clear Creek County when Glenn Dew and Melvin LeBlow lost their lives in an attempt to penetrate the abandoned workings which were filled with foul air.

COSTILLA (3)

The Colorado Aggregate Company continued to ship large tonnages of scoria during the year, which is used in the production of building blocks. Plans for the future call for an expansion of the operation.

CUSTER (2)

The Green Quarry, operated by the Great Lakes Carbon Corporation, continued full-scale production of perlite during the year. The mined product is trucked to the company's sizing plant at Florence, Colorado, and from there it is shipped to other parts of the country for exfoliating. Other operations include the Buckeye, Tantalizer, Passiflora and Defender Mines. A small mill was placed in operation by the Defender Company and this plant treated ore from the Passiflora and Defender properties. Over 450 claims were filed in the county in 1955 as a result of uranium prospecting, which indicates that uranium production may be expected from this county in the future.

DELTA (4)

Wild cat oil drilling in Delta County was evident all year with the Carter Oil Company and several independent drillers in the field. The Escalante Mesa area was the scene of considerable uranium activity as many new claims were staked. Some uranium production came from individual operators during the year, and many parts of the county are being prospected with some new finds reported. The Doty Sulphur Mine operated during a short period this summer and the low grade sulphur produced was used in the manufacture of fertilizer.

DOLORES (4)

The Rico Argentine Company is continuing their work on the St. Louis Tunnel, which will connect with the Blaine workings at a lower elevation and act as a drainage tunnel for the area. Construction of their sulphuric acid plant was completed and put into operation during the year, and the product will be used in Western Colorado for uranium-vanadium processing. The company's Argentine Mill has operated at capacity during the year on ores from the Mountain Springs and Argentine Mines. Uranium prospecting continues in Dolores County with several finds located around Dunton. Myron Jones and associates operated the St. Louis claim for a time during the summer months with gold and silver production reported.

DOUGLAS (2)

Both the Helmer Clay Mine and the Helmer Silica and Sand Pit, along with the Hillside Mine and the Hogback in Douglas County, were producers in 1955. Limestone and silica rock were produced near Littleton and the clay was produced near Castle Rock. Stroud Wisenhunt shipped 3000 tons of clay per month from the Stevens' Ranch Mine near Castle Rock to the Denver Brick and Tile Company.

EAGLE (3)

The Empire Zinc Division of the New Jersey Zinc Company, operating the Eagle property at Gilman, was the largest producer of silver, copper and zinc in the State. Ore from the mine was treated in the company's 1000-ton mill which is located underground at Gilman. Tonnage remained steady all year and development was continuous. The Morning Mine continued exploration work in the Gold Park District. Eagle County also experienced an oil and uranium boom with over 1000 new claims being recorded at the County Court House. Exploration extended from Horse Mountain south of Eagle to the Piney region and over the hump of New Castle down to the Colorado River, with several uranium claims being filed in the Holy Cross District. Many promising oil finds were reported and drilling companies were active with exploration work.

EL PASO (2)

The Golden Cycle Corporation's Lennox Breed Quarry continued its production during the year and limestone was furnished for the plant at Pikeview. The Castle Concrete Company went into production towards the middle of October, 1955, producing 1000 tons of concrete aggregate per day from their Castle quarry and new crushing plant. Considerable exploration work was done on several uranium properties with encouraging results.

FREMONT (2)

With the wide variety of non-metallic production in Fremont County, limestone and limestone products lead the list in value. By-products from feldspar operations include beryllium and tantalum with thorium being mined in the Wet Mountain District by the Wet Mountain Mines, Inc. The Fremont Construction Company produced heavy aggregate at the rate of 100 tons per day from their open pit on Iron Mountain during the latter part of the year. This aggregate is a heavy iron ore used for weighting under-water pipe lines and is shipped to points along the Gulf Coast. The J. M. Huber Company and Crescent Uranium Company are operating on Tallahassee Creek and are strip mining some 400 tons of uranium ore per day. Many other companies are prospecting and developing uranium claims, which indicates that fair production of uranium may come from Fremont County. Production of travertine marble and terrazzo chips continued throughout the year, with mica, feldspar and beryllium being produced by Alex Lockhart & Son from the mica lode.

GARFIELD (3)

The Union Carbide Nuclear plant at Rifle, formerly known as the U.S.V. Plant, continued to operate at full capacity on ore coming from Utah, New Mexico and Colorado, and their splendid safety record was maintained. Operations at the Oil Shale Mine were suspended in March of 1955 due to a severe cave-in at the mine. However, further activities and a new method of mining are planned for the coming year. The Isbell Construction Company has the contract for the mining and development work for the Union Oil Company at Parachute Creek. Stearns-Roger Manufacturing Company have the contract for the installation of an aerial tramway and retort plant. A crushing and sizing plant was installed at the old round house in Glenwood Springs by the Basic Chemical Corporation. This plant is used for the treatment of lime from the old marble quarries, and there is considerable demand for the product. The Dotsero Lava Company continued production of cinder blocks from cinders recovered in the nearby area. Many new uranium claims were staked in the county with favorable findings reported.

GILPIN (1)

With continued uranium exploration in Gilpin County by over seventeen operating properties the future of "The Little Kingdom" looks prosperous. Many of the operating companies are shipping gold-silver ore and by reason of the search for uranium more gold-silver deposits are being located. Many week-end prospectors have reported new finds of both uranium and gold-silver. A significant operation is evidenced by the entry of the Union Oil Company, through the Minerals Exploration Company, into the exploration field on the Black Hawk lode above Black Hawk. The United Mining & Leasing Corporation have completed the rebuilding of the old Boodle Mill and had the same in operation during the latter part of the year. The Cherokee Uranium Mining Corporation have done considerable work on their properties and have been able to keep their Gold Ridge Mill busy throughout the year. Activities for the county have shown an increase over 1954 and the actual production is much higher. Late in the year operations at the Chain-O-Mines property above Central City started with a rehabilitation program which will place the mill in operation and prepare the mining property for production.

GRAND (3)

Uranium prospecting and development continued in the county with no significant production yet reported in 1955. The Lucky Sunday Mining Company located on Gore Range has sunk the Lucky Sunday No. 1 Shaft into a flat ore deposit but to date no production has come from this property. Operations have not been resumed on the Undecided Group which was operated by the Newmont Exploration Company.

GUNNISON (4)

The discovery of uranium in Gunnison County and the resumption of operations at the Keystone Mine hold forth a bright future for mining in the area. Hundreds of new uranium claims have been located and several of these are at least promising producers. The new Keystone Mill, operated by the American Smelting & Refining Company, is now in active production, and ore developed in the past few years promises to be more than adequate to supply the mill. In addition to its own ore, the mill will receive custom ore from mines in the area such as Micawber Mine operated by the New Mar Uranium Company, and the Daisy Mine located above the Keystone property. Operations at the Carter Mine and the Gold Lynx Mine have been resumed and these operations will add to future production. The United States Lithium Company is operating the Brown Derby Mine and producing lepidolite and beryl ores. Large lithium ore reserves have reportedly been located and developed. Rare earth deposits near Powderhorn are being developed by the Rare Earth Mining Company and the production of rare earth material is encouraging for the future. Wildcat drilling on Tomichi Creek, near Doyleville, was in progress during the year.

HINSDALE (4)

With the exception of uranium prospecting and small operations at the Hoosier Boy, Rodney, Pellican, and Black Crook properties, mining in Hinsdale County is at a low ebb. This one-time great mineral producing county in Colorado is still a storehouse of precious and base minerals and needs only proper development and financial backing to again be productive. The purchase of the Ute and Ulay properties by the Idarado Mining Company holds forth some encouragement for the future. Reconditioning of the old Martin Mill and the acquisition of the Golden Wonder, Gnome, and Detroit mines by the Kassel Uranium Enterprises has been responsible for some additional activity in the county.

HUERFANO (2)

With reported discoveries of uranium ores in Huerfano County in the La Veta Pass area and on the East Slope of the Sangre de Cristo range and actual prospecting and development activity, some production from this county may be expected. Many new claims have been recorded in the office of the county clerk & recorder.

JACKSON (3)

The Ozark-Mahoning Company continued their record production of fluorspar at their Cowdrey Mine and Mill, and new development work continued. The Aluminum Company of America had a considerable amount of work done on the rehabilitating of the Alcoa Shaft, with the Ozark-Mahoning Company doing the actual work. The Midget Mine reported shipping copper-bearing ore for sampling. A concentrating and sampling plant, to handle the Black Bunny manganese ore, was completed east of Rabbit Ears Pass, but operations ceased the latter part of the year. Several wildcat oil wells were drilled by major companies with good results reported. The Continental Oil Company continued to operate their cycling plant at Walden and a considerable amount of plant improvement was accomplished during the year.

JEFFERSON (1)

With Jefferson County still the largest producer of clay in the State, other mineral discoveries indicate that mining activities and production will be greatly increased. The Four Corners Uranium discovery south of Morrison, along with the Schwartzwalder property on Ralston Creek which is now in production, will enhance the mineral value of this county. The discovery of oil on the Pallero property and the drilling of other wells in the area indicate a future in oil. The several processing and chemical plants in the county have been active all year and these plants have received ore from various feldspar, beryl and mica deposits in the State. Placer gold has been recovered from the various gravel plants in the county.

KIT CARSON (1)

Like many other counties in Eastern Colorado oil exploration has continued throughout the year and reported discoveries in Kit Carson County hold forth a bright future for oil production.

LAKE (3)

Mining activities in Lake County have shown an increase over 1954 from the standpoint of both large and small operations. The Resurrection Mill operated on ores from the Helena Mine, and on other custom ores from Resurrection No. 2, Yak Tunnel, Ibex Nos. 2 and 4, Hayden Shaft, the Fannie Rawlins and the Bi-Metallic mine. Other active mines in the area were the Irene and the Julia Fisk which were operated by the Resurrection Mining Company. Operations at the Arkansas Valley Plant of the American Smelting & Refining Company continued throughout the year on ores from the surrounding states, as well as from Colorado. Production at the Climax Molybdenum Company, one of the largest mines in the country, exceeded the record of any prior year. The \$34,000,000 expansion program was completed in the early part of 1955, and another new milling unit costing upwards of three-quarters of a million dollars will be added in the near future. This will increase their tonnage approximately 2000 tons daily over the present production of 30,000 tons. In addition to this record production, development work was continued in both the Phillipson and Storke Tunnels.

LA PLATA (4)

La Plata County is fast becoming the center of oil drilling activities in the Four Corners area with many of the major companies maintaining offices in Durango. Oil and gas production in the county is on the increase with additional discoveries in the Red Mesa and Ignacio areas. A filter plant and boosting station is being constructed between Ignacio and Durango and it is reported that this plant will eventually produce gasoline. The Vanadium Corporation of America's reduction plant at Durango has again increased production, which makes this plant one of the largest in Colorado. Continued prospecting for uranium in La Plata County has opened new properties in the Lightner Creek and Junction Creek areas. Both gold and uranium are now being produced in La Plata Canyon above Hesperus. The Bessie G. property, under the management of Zodomok Mines, Inc., continued to produce and mill high grade gold ore.

LARIMER (1)

Mining activities in Larimer County remain about the same as in 1954 with uranium prospecting still in the limelight. There was no production reported from the Copper King Mine which continued to operate as a tourist mine. The Norberg Lime Quarry maintained production during the year on lime for sugar plant use. Both the Ideal Cement Company at their Boettcher Quarries and the U. S. Gypsum Company maintained their high rate of

production in cement products during the year. Ideal plans to double their capacity by spending upwards of \$5,000,000 in new plant equipment. The new South Loveland Oil Field has reported several new producing wells and this field, along with other new discoveries, promises increased future production for the county.

LAS ANIMAS (2)

The New Mary Clay Mine reported production during the summer months with some fifty tons per day. The Santa Fe Clay Mine owned by the Standard Fire Brick Company of Pueblo produced 750 tons of fire clay per month for the full year. This mine is located near Trinidad at Starkville. Considerable acreage has been leased in Las Animas County by Bruce Sullivan and E. W. Pauley for the purpose of oil exploration. A great many wildcat wells have been drilled in the county and eventual production is anticipated.

LOGAN (1)

Logan County was the second largest oil producing county in the State in 1955 with a production of over 9,000,000 barrels of oil. More than eight productive fields were active during the year and continued oil development will, no doubt, keep Logan County among the top producers of the State.

MESA (4)

Grand Junction, located in Mesa County and in the center of the Colorado Plateau uranium area, has become the hub of uranium activities in the West. Many of the principal companies, as well as individual operators, have their offices in Grand Junction. The Atomic Energy Commission has its office and plant just outside the city limits. Climax Uranium Company's processing plant is located in Grand Junction and this plant receives ore from mines all over the district. New uranium finds are being reported daily in the Gateway, Calamity, and Outlaw Mesa areas which, added to past production from these areas, makes Mesa County one of the largest uranium producers. A plant for the American Gilsonite Company near Grand Junction is now under construction. Oil activity continues in the county and offers the promise of future production from the area.

MINERAL (3)

Mining activity in Mineral County suffered a severe setback this year when the Emperius Mill was totally destroyed by fire in the early part of August. This large producer of gold, silver, lead and zinc from the Commodore and Amethyst Mines was brought to a standstill when the mill burned as a result of a diesel power plant explosion. Some development, however, was continued at the mines and mill reconstruction was started. Several other operations, including the Outlet Mining Company and Monnon Leasing Company, have been active all year. Like many other counties in the State, Mineral County is in the process of being thoroughly prospected for uranium with some reported good discoveries.

MOFFAT (3)

Oil fields in the county, including Hiawatha Dome, Powder Wash, Tow Creek, Isles Dome, Maudlin Gulch and Elk Springs, continued to produce during the year. Wildcat drilling continued and several new wells were brought in. Uranium prospecting was at a very high level with many claims being located and excellent finds were reported. Shawano Development Company reports finds of high concentrations of selenium and uranium in Northwestern Colorado in Moffat County. A pilot plant for testing and sampling uranium ores was operated by Trace Elements Company and their ore was trucked to the Rifle, Colorado plant for treatment. Stearns-Roger Manufacturing Company will be the contractor for building a new mill at Maybell for treating uranium ores.

MONTEZUMA (4)

Although Montezuma County has been surrounded with uranium production and many principal operators have their offices in Cortez, the first production from the county came from the LeRue Mining Company in northwestern Montezuma County. Many hundreds of claims have been staked in the county and with reported finds, the production should increase. Wildcat wells are being drilled in the western part of the county and several producers of both gas and oil have been reported. The production of dry ice from CO₂ gas in McElmo Canyon was steady during the year.

MONTROSE (4)

With the location of the Union Carbide Nuclear plant in Uravan and the V.C.A. plant at Naturita, along with a great many producing areas in the county, Montrose County is probably the largest producer of uranium-vanadium ores in the State. New discoveries of uranium are being made daily in all parts of the county and steady production has been maintained all year in the Long Park, Paradox, Monogram Mesa, Bull Canyon, Gypsum Valley, Atkinson Mesa, and Club Mesa areas. Many large companies have carried on extensive drilling operations in all parts of the county and additional large deposits have been located. Plant capacity of both of the reduction plants has been increased and ore is received from both company and individual properties all over the district. Late in the year a rehabilitation program was started on the old Cashin Mine on LaSalle Creek. Some oil drilling around Montrose was reported.

MORGAN (1)

Oil production and development continued in Morgan County this year with new fields being opened and prospected. County production ranked third in oil in 1955 with 7,496,183 barrels. The Adena field in Morgan County has developed into the second largest in the State.

OURAY (4)

Mining activity in Ouray County remained steady during 1955 with continuous production from the Treasury Tunnel operated by the Idarado Mining Company and the Camp Bird Mine operated by King Lease, Inc. Smaller operations on Brown Mountain and Red Mountain helped to increase the county production. New operations were started on the Greyhound Group west of Iron-ton Park and at the Sunday Mine on Dexter Creek. With the addition of these two new operations it is hoped that Ouray County activity will increase.

PARK (2)

The Betty Mine was operated on a small scale. The Champagne Mine of the Treasury Vault Uranium Corporation is driving a tunnel to known uranium deposits. The Buckskin Joe Mine operated most of the year on development work. The Ling property also was operating during the summer months on development work. The Montgomery Dam Project employed 225 men on construction except during the winter months. The Blue River Tunnel operated one shift all during the year. Many new uranium claims have been located and prospecting continues in the county with fair results.

PITKIN (3)

Some mining activity was reported in the Taylor Pass area twenty-one miles south of Aspen. One car of lead-silver-zinc-gold ore was shipped from the Antimony Mine which was leased by Jack Bryan of Silt, Colorado. No other activity was reported in Pitkin County, with the exception of some development at the Smuggler Mine at Aspen.

PUEBLO (2)

The Standard Fire Brick Company, located at Capers Spur thirty miles southeast of Pueblo, has been producing some 600 tons of fire clay per month during 1955 in their underground workings. Other producers located near Stone City were also active during the year. Clay from the Nellie Helen Mine was shipped to Canon City, Pueblo and Denver at the rate of approximately 1000 tons per month. New uranium strikes have been made in Pueblo County but to date there has been no evident production. Sand and gravel continued to add to the county production. Standard Fire Brick Company operated their clay mine at Rock Creek all during the year and the mica grinding plant at Pueblo operated the entire year.

RIO BLANCO (3)

The Uranium Peak area east of Meeker continued to be very active in mining with several properties shipping uranium ores. Oil production in Rio Blanco's oil fields, which include Rangely, Wilson Creek, and Picancee Creek, set a new record of production

in the State. Activities of all major companies were expanded and promise a long and prosperous future in oil production for the county. Several wildcat wells were drilled and many added production to the county.

ROUTT (3)

In addition to the exploration and development work on the uranium claims located in the Fish Creek Falls area north of Steamboat Springs, work has been resumed at the Farwell Mountain property east of Hahns Peak. The Colorado Mining Corporation, under direction of J. R. Fyfe, is now core drilling to determine the extent of ore bodies. Assay values show tungsten, molybdenum, copper, silver and gold. Routt County like other counties in the State is experiencing a rush in uranium prospecting.

SAGUACHE (3 & 4)

Mining activities in Saguache County have been on the increase during the year on both sides of the Continental Divide. Active mines in the Bonanza area include the Rawley, Cocomongo, Bonanza, Whale, Vallejo, Marine Lode, K. O., Queen City, Navajo and Bennett. Production of lead-silver ores from some of these mines was reported and the Villa Grove Turquoise Lode continued to explore and cob turquoise stones. Many hundreds of claims have been staked in the Cochetopa area and several large mining firms have been active in the district. Core drilling has been extensive and many new finds have been recorded. With the addition of the Murchison Brothers to the Thornburg holdings, large scale operations at Los Ochos can be expected.

SAN JUAN (4)

With operations at the Shenandoah Dives Mining Company shut down since early 1953, mining in San Juan County has been confined to small leasing and individual operations. Some operations were carried on at the Lead Carbonate Mine, the Osceola, Pride of the West, the Mogul, and the Pride Mill. San Juan County was dealt a severe blow in the passing of Charles A. Chase on August 31, 1955. Mr. Chase was manager of the Shenandoah Dives Mining Company since it started operations in 1925. Other operations in this county include the Graysill Group, Norma Jean, Black Hawk, London, Lark, Longfellow Shaft, Silver Ledge, and Vay claims on Coalbank Hill.

SAN MIGUEL (4)

Although the Silver Bell Mines Company has suspended operations in San Miguel County for the time being, the county continues to be very active. The Iron Springs Placer continued to ship bog-iron for paint pigment, and uranium activity in the west end of the county continued to boom. New uranium deposits were located and developed in the Legin Group area, Ham Canyon and O'Neill Group areas, and production from those areas continued steady during the year. Of great importance to San Miguel

County are the operations of Telluride Mines, Inc. and the Iadarado Mining Company. Operations through the Treasury Tunnel on the Black Bear Vein, Argentine and Ajax Veins in San Miguel County have made this county one of the large producers in the State. During the year Telluride Mines, Inc. has been engaged in large scale development work on the Montana Vein through the mill level tunnel, and these workings have been connected with the Argentine and Ajax workings on the Meldrum level, which connects through to the Treasury Tunnel level. The T.M.I. Mill has been completely redesigned and expanded for increased tonnage. Present plans call for the T.M.I. operations to get into production early in 1956 on a 1400-ton per day basis.

SUMMIT (3)

With operations at the Wellington, Big Four, Boss, Silver Wing and Chatauqua Mines during the year, production in Summit County has held its own. The Wellington Mine, managed by W. L. Davenport, remains the prominent producer in the county. Placer operations have been carried on by Claude Roberts and Earl Carson on their Falcomb Hill property, and by the B. & O. & H. Placer. Burke-Martin Mines at Montezuma have uncovered new veins which show great promise of future production. Their new 50-ton mill is being operated on the property with Tom E. Martin as superintendent. Like other counties in the State, uranium prospecting has been in full swing and several deposits have been uncovered.

TELLER (2)

Mining activity in Teller County has shown an increase this year over 1954 with the resumption of operations on several old producers. The Golden Cycle Corporation secured leases on the United Gold Mines, Legal Tender and Ready Money properties and some shipments from these properties were made. The lateral from the Carlton Tunnel to the Cresson was continued, which made additional ore discoveries possible in the shaft by lowering the water level. Ore from the El Paso Mine Dump and several other properties was milled at the Golden Cycle Mill with overall tonnage about the same as 1954. Shipments from the Strong Mine were made to the Carlton Mill and operations at the Gold Sovereign were resumed during the year. The recent uranium strike on the Straton property on Gold Hill created considerable activity in the area. At the present time a fifty-foot shaft has been sunk on the ore body which has the appearance of a pipe or chimney deposit. The extent of the find has not been determined but hopes of considerable uranium production continue. Recovery of peat from the Moore Peat Bog and the Divide Peat Bog continued throughout the summer months. Late in the year an uranium strike was reported at the Cameron Mine.

WASHINGTON (1)

Washington County is fast becoming one of our best oil producing counties. Considerable gas has been encountered and Washington County ranks high in gas production for the State. New fields are being continually opened and developed and this activity makes Washington County one of the most promising in the State.

WELD (1)

Oil exploration in Weld County was on the increase during the year and several new fields have been proven. The future outlook for Weld County in oil production is exceptionally bright.

PRODUCTION BY COUNTIES

1955

ADAMS COUNTY

* BRIGHTON

Area 1251 square miles

Two plants and oil wells—33 men

Gold\$ 23,705

Silver 163

Total.....\$ 23,868

Petroleum\$ 3,027,790

TOTAL PRODUCTION FOR COUNTY.....\$ 3,051,658

ARAPAHOE COUNTY

* LITTLETON

Area 820 square miles

Oil wells, etc.—15 men

Uranium Restricted

ARCHULETA COUNTY

* PAGOSA SPRINGS

Area 1364 square miles

Oil wells—100 men

Petroleum\$ 499,796

TOTAL PRODUCTION FOR COUNTY.....\$ 499,796

BENT COUNTY

* LAS ANIMAS

Area 1543 square miles

Oil—15 men

Petroleum\$ 11,769

TOTAL PRODUCTION FOR COUNTY.....\$ 11,769

BOULDER COUNTY

* BOULDER

Area 758 square miles

30 mines, 17 plants, 6 quarries, 1 placer, and oil—431 men

Gold\$ 7,350

Silver 40,999

Copper 5,180

Lead 26,820

Tungsten 1,256,997

Total.....\$ 1,337,334

Clay\$ 4,200

Fluorspar 1,702,290

Peat 35,000

Building stone..... 1,540,000

Crushed stone..... 22,000

Sand and gravel..... 290,000

Total.....\$ 3,593,490

Petroleum\$ 5,193

TOTAL PRODUCTION FOR COUNTY.....\$ 6,995,672

CHAFFEE COUNTY

* SALIDA

Area 1040 square miles

7 mines, 7 quarries—109 men

Gold	\$ 35
Silver	995
Beryl	500

Total.....	\$ 1,530
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Calcium phosphate.....	\$ 1,700
Feldspar	333,600
Crushed stone	2,300
Limestone	1,269,120
Monumental stone.....	150,000
Gypsum	103,100
Mica	8,400

Total.....	\$ 1,868,220
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TOTAL PRODUCTION FOR COUNTY.....	\$ 1,869,750
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CLEAR CREEK COUNTY

* GEORGETOWN

Area 395 square miles

22 mines, 2 plants, 1 placer—94 men

Gold	\$ 19,600
Silver	19,860
Copper	4,440
Lead	26,820
Zinc	2,460
Beryl	2,000

TOTAL PRODUCTION FOR COUNTY.....	\$ 75,180
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COSTILLA COUNTY

* SAN LUIS

Area 1220 square miles

1 quarry—5 men

Volcanic cinders.....	\$ 64,600
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TOTAL PRODUCTION FOR COUNTY.....	\$ 64,600
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CUSTER COUNTY

* WESTCLIFFE

Area 738 square miles

2 mines, 2 quarries—46 men

Gold	\$ 2,800
Silver	1,457
Lead	1,192
Copper	3,700

Total.....	\$ 9,149
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Monumental stone	\$ 12,100
Perlite	693,000

Total.....	\$ 705,100
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TOTAL PRODUCTION FOR COUNTY.....	\$ 768,772
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DENVER COUNTY

* DENVER

Area 67.1 square miles

3 plants—200 men

Gold	\$ 19,695
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TOTAL PRODUCTION FOR COUNTY.....	\$ 19,695
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DOLORES COUNTY

* DOVE CREEK

Area 1029 square miles

5 mines, 2 plants—212 men

Gold	\$ 5,600
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Silver	93,492
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Copper	7,400
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Lead	658,580
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Zinc	666,660
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Pyrite	75,000
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TOTAL PRODUCTION FOR COUNTY.....	\$ 1,506,732
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DOUGLAS COUNTY

* CASTLE ROCK

Area 844 square miles

2 mines, 2 quarries—6 men

Clay	\$ 82,100
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Limestone	2,020
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Silica rock	3,900
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TOTAL PRODUCTION FOR COUNTY.....	\$ 88,020
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EAGLE COUNTY

* EAGLE

Area 1686 square miles

4 mines, 1 plant—579 men

Gold	\$ 315,000
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Silver	1,493,786
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Copper	1,650,200
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Lead	914,860
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Zinc	5,215,200
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Total.....	\$ 9,589,046
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Volcanic cinder.....	\$ 1,000
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TOTAL PRODUCTION FOR COUNTY.....	\$ 9,590,046
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ELBERT COUNTY

* KIOWA

Area 1864 square miles

Oil—10 men

Petroleum	\$ 1,035
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TOTAL PRODUCTION FOR COUNTY.....	\$ 1,035
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EL PASO COUNTY

* COLORADO SPRINGS

Area 2159 square miles

1 mine, 4 quarries—150 men

Clay	\$ 150,300
Crushed stone	107,038
Limestone	190,000
Sand and gravel.....	1,960,000
Building stone.....	275,000

TOTAL PRODUCTION FOR COUNTY.....\$ 2,682,338
FREMONT COUNTY

* CANON CITY

Area 1562 square miles

3 mines, 1 plant, 19 quarries, oil—170 men

Silver	\$ 18
Copper	1,480
Beryl	3,100
Tantalum	4,000

Total.....\$ 8,598

Clay	\$ 48,900
Cement	8,696,922
Dolomite	149,978
Feldspar	12,200
Gypsum	76,000
Building stone.....	98,690
Limestone	769,621
Mica	2,700
Monumental stone	4,200
Plaster	61,500
Silica rock	27,959
Terrazzo chips (marble).....	10,114
Travertine	221,100

Total.....\$10,169,746

Petroleum \$ 86,435 |

TOTAL PRODUCTION FOR COUNTY.....\$10,264,797
GARFIELD COUNTY

* GLENWOOD SPRINGS

Area 3000 square miles

2 mines, 2 plants—370 men

Limestone	\$ 23,200
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TOTAL PRODUCTION FOR COUNTY.....\$ 23,200

GILPIN COUNTY

* CENTRAL CITY

Area 149 square miles

22 mines, 4 mills—110 men

Gold	\$ 15,400
Silver	16,472
Copper	3,700
Lead	39,336
Zinc	4,920
Tungsten	620

Total.....\$ 80,448

Peat\$ 7,000

TOTAL PRODUCTION FOR COUNTY.....\$ 87,448
GRAND COUNTY

* HOT SULPHUR SPRINGS

Area 1869 square miles

3 mines—10 men

Uranium Restricted

GUNNISON COUNTY

* GUNNISON

Area 3243 square miles

6 mines, 2 mills—296 men

Gold	\$ 2,100
Silver	138,925
Lead	266,480
Copper	125,800
Zinc	290,280
Beryl	21,100
Lepidolite	12,200
Tungsten	300

Total.....\$ 857,185

Mica\$ 4,300

Columbium-Tantalum 6,000

Total.....\$ 10,300

TOTAL PRODUCTION FOR COUNTY.....\$ 867,485

HINSDALE COUNTY

* LAKE CITY

Area 1062 square miles

4 mines—13 men

Gold	\$ 35
Silver	90
Lead	596
Zinc	246

TOTAL PRODUCTION FOR COUNTY.....\$ 967

JACKSON COUNTY

* WALDEN

Area 1628 square miles

3 mines, 2 plants, oil—132 men

Fluorspar	\$ 1,786,821
Manganese	3,400

 Total.....\$ 1,790,221

Petroleum	\$ 776,589
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 TOTAL PRODUCTION FOR COUNTY.....\$ 2,566,810
JEFFERSON COUNTY

* GOLDEN

Area 791 square miles

11 mines, 3 plants, 11 quarries, oil—200 men

Gold	\$ 11,900
Silver	54
Beryl	12,000

 Total.....\$ 23,954

Clay	\$ 661,200
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Feldspar	24,900
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Sand and gravel.....	4,100,000
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Mica	1,200
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 Total.....\$ 4,787,300

Petroleum	\$ 23,426
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 TOTAL PRODUCTION FOR COUNTY.....\$ 4,834,680
LAKE COUNTY

* LEADVILLE

Area 384 square miles

18 mines, 4 plants—1936 men

Gold	\$ 175,000
Silver	89,600
Copper	14,800
Lead	417,200
Zinc	405,900
Tin	29,652
Molybdenum	45,536,600
Tungsten	3,334,023
Pyrite	152,500

 Total.....\$49,813,969

Peat	\$ 4,600
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Silica rock.....	4,100
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 Total.....\$ 8,700

 TOTAL PRODUCTION FOR COUNTY.....\$49,822,669

LA PLATA COUNTY

* DURANGO

Area 1691 square miles

4 mines, 2 plants, oil—400 men

Gold\$ 15,750

Silver 1,086

Total.....\$ 16,836

Petroleum\$ 25,664

TOTAL PRODUCTION FOR COUNTY.....\$ 42,500

LARIMER COUNTY

* FORT COLLINS

Area 2640 square miles

1 mine, 5 plants, 3 quarries, oil—212 men

Gypsum\$ 102,500

Limestone 160,200

Cement 3,632,070

Sand and gravel..... 104,000

Building stone..... 500,000

Total.....\$ 4,498,770

Petroleum\$ 361,903

TOTAL PRODUCTION FOR COUNTY.....\$ 4,860,673

LAS ANIMAS COUNTY

* TRINIDAD

Area 4798 square miles

2 quarries—40 men

Alabaster\$ 6,000

Clay 31,900

TOTAL PRODUCTION FOR COUNTY.....\$ 37,900

LOGAN COUNTY

* STERLING

Area 1849 square miles

Oil—600 men

Petroleum\$25,217,745

TOTAL PRODUCTION FOR COUNTY.....\$25,217,745

MESA COUNTY

* GRAND JUNCTION

Area 3334 square miles

75 mines, 2 plants, oil—1585 men

Sand and gravel.....\$ 130,000

Uranium-vanadium Restricted

TOTAL PRODUCTION FOR COUNTY.....\$ 130,000

MINERAL COUNTY

* CREEDE

Area 923 square miles

5 mines, 2 plants—27 men

Gold	\$ 36,050
Silver	122,363
Copper	14,800
Lead	360,580
Zinc	184,254

TOTAL PRODUCTION FOR COUNTY.....\$ 718,047
MOFFAT COUNTY

* CRAIG

Area 4761 square miles

1 mine, 1 mill, oil—355 men

Uranium-vanadium	Restricted
Petroleum	\$ 2,654,557

TOTAL PRODUCTION FOR COUNTY.....\$ 2,654,557
MONTENZUMA COUNTY

* CORTEZ

Area 2097 square miles

2 mines, oil—21 men

Petroleum	\$ 19,536
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TOTAL PRODUCTION FOR COUNTY.....\$ 19,536
MONTROSE COUNTY

* MONTROSE

Area 2240 square miles

136 mines, 2 mills—1304 men

Uranium-vanadium	Restricted
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MORGAN COUNTY

* FORT MORGAN

Area 1300 square miles

Oil—810 men

Petroleum	\$20,764,442
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TOTAL PRODUCTION FOR COUNTY.....\$20,764,442
OURAY COUNTY

* OURAY

Area 540 square miles

7 mines, 2 mills—620 men

Gold	\$ 117,250
Silver	45,252
Copper	125,800
Lead	204,130
Zinc	110,700

TOTAL PRODUCTION FOR COUNTY.....\$ 603,132

PARK COUNTY

* FAIRPLAY

Area 2178 square miles

3 mines—30 men

Gold	\$ 700
Silver	679
Lead	1,490
Copper	2,220

TOTAL PRODUCTION FOR COUNTY.....	\$ 5,089
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PITKIN COUNTY

* ASPEN

Area 975 square miles

1 mine—3 men

Silver	\$ 118
Lead	298

TOTAL PRODUCTION FOR COUNTY.....	\$ 416
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PUEBLO COUNTY

* PUEBLO

Area 2414 square miles

3 mines, 1 plant, 1 quarry—35 men

Silver	\$ 5
Copper	740

Total.....	\$ 745
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Clay	\$ 212,000
Sand and gravel.....	2,100,000
Mica	5,725

Total.....	\$ 2,317,725
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TOTAL PRODUCTION FOR COUNTY.....	\$ 2,318,470
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RIO BLANCO COUNTY

* MEEKER

Area 3264 square miles

3 mines, oil—460 men

Uranium	Restricted
Petroleum	\$73,166,406

TOTAL PRODUCTION FOR COUNTY.....	\$73,166,406
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RIO GRANDE COUNTY

* DEL NORTE

Area 916 square miles

1 mine—3 men

Gold	\$ 1,120
Silver	1

TOTAL PRODUCTION FOR COUNTY.....	\$ 1,121
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ROUTT COUNTY

* STEAMBOAT SPRINGS

Area 2331 square miles

2 mines, oil—20 men

Uranium	Restricted
Petroleum	\$ 118,254

TOTAL PRODUCTION FOR COUNTY.....\$ 118,254
SAGUACHE COUNTY

* SAGUACHE

Area 3146 square miles

19 mines, 2 mills—153 men

Gold	\$ 560
Silver	2,263
Copper	740
Lead	16,390
Zinc	7,380

Total.....\$ 27,333

Turquoise	\$ 8,100
Uranium	Restricted

TOTAL PRODUCTION FOR COUNTY.....\$ 35,433
SAN JUAN COUNTY

* SILVERTON

Area 392 square miles

13 mines, 1 mill—69 men

Gold	\$ 16,800
Silver	32,129
Copper	29,600
Lead	146,020
Zinc	51,660
Tungsten	2,000

TOTAL PRODUCTION FOR COUNTY.....\$ 278,209
SAN MIGUEL COUNTY

* TELLURIDE

Area 1284 square miles

79 mines, 2 mills, oil—660 men

Gold	\$ 660,800
Silver	411,798
Copper	1,184,000
Lead	1,522,780
Zinc	1,611,300
Bog iron	52,040

TOTAL PRODUCTION FOR COUNTY.....\$ 5,442,710

SUMMIT COUNTY

* BRECKENRIDGE

Area 616 square miles

6 mines, 2 mills, 1 placer—103 men

Gold	\$ 8,750
Silver	15,929
Copper	7,400
Lead	157,940
Zinc	157,440
Manganese	2,100

TOTAL PRODUCTION FOR COUNTY.....\$ 349,559
TELLER COUNTY

* CRIPPLE CREEK

Area 555 square miles

7 mines, 1 mill, 2 quarries—217 men

Gold	\$ 1,701,000
Silver	6,607
Total.....	\$ 1,707,607

Feldspar	\$ 8,550
Monumental stone	22,300
Peat	6,000
Total.....	\$ 36,850

TOTAL PRODUCTION FOR COUNTY.....\$ 1,744,557
WASHINGTON COUNTY

* AKRON

Area 2530 square miles

Oil—205 men

Petroleum	\$16,168,911
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TOTAL PRODUCTION FOR COUNTY.....\$16,168,911
WELD COUNTY

* GREELEY

Area 4033 square miles

Oil—222 men

Petroleum	\$ 4,269,137
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TOTAL PRODUCTION FOR COUNTY.....\$ 4,269,137

SAFETY AWARDS

The following list of companies, all of whom employed ten or more men, worked the entire year of 1955 without a lost-time accident and were the recipients of Colorado Bureau of Mines Safety Awards.

Stanolin Oil & Gas Company, Rangely
California Gas Extraction Plant, Rangely
George W. Parfet Estate, Clay Mining, Golden
Burke-Martin Mining Company, Montezuma
Union Carbide Nuclear Company, Mining Department
Western Feldspar Mill, Salida
Ideal Cement Company, Portland Quarry, Portland
Ideal Cement Company, Boettcher Quarry, Fort Collins
General Chemical Division, Allied Chemical & Dye Corporation, Valmont Mill, Boulder
Phillips Petroleum Company
Empire Zinc Division, New Jersey Zinc Company, Canon City Plant, Canon City
Denver Sewer Pipe & Clay Company, Strainland Mine, Golden
Federal Uranium Company, Georgetown Mine, Slick Rock
Colorado Materials Company, Lennox Breed Quarry, Colorado Springs
E. T. Holderman, Long Park No. 12, Uravan

ACCIDENTS

Six fatal accidents were charged to the underground mining industry in 1955, plus one fatality each in a quarry and a mill. Oil well drilling again accounted for four fatalities which brings the 1955 total to twelve, or three less than 1954, and establishes an all-time low.

Falls of persons and haulage accounted for one fatal each underground, fall of rock accounted for two and improper blasting procedure accounted for two. Falling objects accounted for all four oil well fatalities, machinery was responsible for the mill fatal and falling rock caused the quarry fatal accident.

A total of 34,979,600 man-hours was worked in the industry in 1955, with a total of 1191 lost-time injuries causing 87,446 days to be lost from accidents. The frequency rate for 1955 was 34.3 or 2.5 lower than 1954. The severity rate was 2.49 or 1.09 lower than 1954. These rates are an improvement over the preceding years and a definite indication that Colorado Bureau of Mines inspection is producing beneficial results.

The fatal accident rate per 1000 men employed in mining was 0.78. The fatal accident rate per 1000 men employed in the oil industry was 1.27. There were 1426 men employed per fatal accident in mines, mills, quarries, etc. and 15.03 men were employed for each lost-time accident. Based on estimated tonnage one man was killed for every 2,250,000 tons of ore produced and there was one lost-time accident for every 23,715 tons of ore mined. In the oil industry 784 men were employed for each fatality and 7.25 men employed for each lost-time accident. There was one fatal accident for every 12,783,980 barrels of oil produced and one lost-time accident for every 118,369 barrels of oil production.

SUMMARY OF ACCIDENTS—1955

	Total Man Hours
Mines, Surface.....	6,420,000
Mines, Underground.....	9,890,000
Quarries and Clay Pits.....	909,600
Mills, Smelters, Plants, etc.....	8,910,400
State and Federal Projects.....	1,288,000
Oil Wells.....	7,531,200

Totals.....34,979,600

This table includes the loss of 72,000 days due to 12 fatalities and 3,635 days due to 15 permanent partial disabilities.

Frequency rate= $\frac{\text{No. of injuries} \times 1,000,000}{\text{No. of man-hours of exposure}}$

No. of man-hours of exposure

The above severity rates have been calculated from both the old formula of using 1,000 man-hours and the new formula using 1,000,000 man-hours. Approval of the new formula is listed by the American Standard Method of Recording and Measuring Work Injury Experience, sponsored by the National Safety Council, Association of Casualty and Surety Companies, approved December 16, 1954, American Standards Association.

Lost-Time Injuries	Number of Days Lost	Frequency Rate Per One Million Man Hours	Severity Rate Per One Thousand Man Hours	Severity Rate Per One Million Man Hours
109	13,116	17.0	2.04	2040.
484	43,101	48.9	4.35	4358.
26	273	28.6	.30	300.
128	2,229	14.3	.249	249.
12	31	9.3	.024	24.
432	28,696	57.4	3.808	3808.
1,191	87,446	34.3	2.49	2,499.
Total time charges in days \times 1,000 or 1,000,000				

FATAL ACCIDENTS—1955

Employed By

METAL MINING

Rico Argentine Mining Co.
LeClair Consolidated Gold Mining Co.
LaSalle Mining Co.
Horn and Burger (Wellington)
George H. Sager
George H. Sager

QUARRY

Charles Simpson

MILL

U. S. Vanadium Corporation

OIL WELL

Don Johnston Drilling Co.
R. L. Manning Drilling Co.
Beckman, Inc.

Sherwin Drilling Co.

Date	Name	Cause of Death
1-14-55	Frank Kee Bia	Crushed by falling slab
2-12-55	Clarence Peterson	Pulchred failure. Fell in stope
6-21-55	Julius B. Wingate	Rollled between motor and timber
9-21-55	Robert Lee Graves	Fall in raise with skip
11-17-55	Henry E. Stout	Premature blast
11-17-55	David R. Sprichman	Premature blast
4-19-55	Edward J. Rowe	Crushed by falling slab
1- 1-55	Harold Cunningham	Roaster arm. Broken neck
4-20-55	Harold R. Luckinbill	Hit by traveling block guard
6-21-55	Garland V. Koonce	Hit by falling core barrel
9- 7-55	Allen L. Tackett	Traveling block pulled into crown block. Head injury
11- 7-55	Jack B. Gardner	Hit by falling drill pipe

AGENCY CAUSING ACCIDENT

MINES, SURFACE	Fatalis	Temporary Injuries	
		Loss of one day or more	
Bars - Bins - Chutes		3	
Cables - Hose - Ropes		4	
Cars - Motors - Vehicles		25	
Chains - Gears - Sprockets		1	
Containers		7	
Drills - Drilling Equipment		12	
Dust and Particles.....		3	
Electricity - Elec. Equipment		2	
Falls		6	
Flames - Fire - Hot Substances		3	
Ladders - Manways		1	
Machinery	1	9	
Materials		2	
Metal Objects		15	
Platforms - Staging - Scaffolds		1	
Rock - Ore - Ground	1	7	
Tanks		1	
Timber - Lumber - Poles		4	
Unclassified - Insufficient Data.....		1	
	<hr/>	<hr/>	<hr/>
Totals.....	2	107	109

QUARRIES

Cables - Hose - Ropes	1
Belts - Conveyors - Pulleys	2
Falls	2
Metal Objects	5
Rock - Ore - Ground	13
Shovels, power.....	1
Timber - Lumber - Poles	2
	<hr/>
Total	26

MINES, UNDERGROUND

Bars - Bins - Chutes	7
Cables - Hose - Ropes	24
Cars - Motors - Vehicles	2
Chains - Gears - Sprockets	2
Belts - Conveyors - Pulleys	2
Containers	3
Chemicals	3
Doors - Windows - Gates	1
Drills - Drilling Equipment	27
Dust and Particles.....	3
Explosives - Loading, Firing	5
Electricity - Elec. Equipment	2
Falls	25

AGENCY CAUSING ACCIDENT—Continued

MINES, UNDERGROUND—Cont.	Fatalis	Temporary Injuries	
		Loss of one day or more	
Falling or Flying Objects.....		1	
Flames - Fire - Hot Substances		3	
Hoists - Hoisting Apparatus		3	
Ladders - Manways		3	
Machinery		48	
Materials		3	
Metal Objects		51	
Platforms - Staging - Scaffolds	1	3	
Premature or Delayed Blasts.....	2		
Rock - Ore - Ground		141	
Tanks		1	
Timber - Lumber - Poles		26	
Unclassified - Insufficient Data		2	
		<hr/>	<hr/>
Totals.....	5	479	484

MILLS, SMELTERS, PLANTS, ETC.

Bars - Bins - Chutes	1
Cables - Hose - Ropes	1
Cars - Motors - Vehicles	12
Chains - Gears - Sprockets	4
Belts - Conveyors - Pulleys	2
Containers	4
Chemicals	1
Drills - Drilling Equipment	1
Dust and Particles.....	2
Explosives - Loading, Firing	2
Electricity - Elec. Equipment	1
Falls	12
Flames - Fire - Hot Substances	8
Hoists - Hoisting Apparatus	1
Ladders - Manways	3
Machinery	13
Materials	9
Metal Objects	27
Platforms - Staging - Scaffolds	1
Rock - Ore - Ground	10
Timber - Lumber - Poles	11
Unclassified - Insufficient Data	2
	<hr/>
Total.....	128

AGENCY CAUSING ACCIDENT—Continued

Temporary Injuries
Loss of one day
or more

STATE AND FEDERAL PROJECTS

Cables - Hose - Ropes	1
Cars - Motors - Vehicles	1
Drills -Drilling Equipment	2
Falls	1
Materials	1
Metal Objects	2
Rock- Ore - Ground	4
Total.....	12

OIL WELLS

Fatals

Bars - Bins - Chutes	3	
Cables - Hose - Ropes	16	
Cars - Motors - Vehicles	17	
Chains - Gears - Sprockets	8	
Containers	3	
Chemicals	1	
Drills - Drilling Equipment	3	175
Dust and Particles.....	4	
Explosives - Loading, Firing	1	
Electricity - Elec. Equipment	5	
Falls	32	
Flames - Fire - Hot Substances	13	
Ladders - Manways	2	
Machinery	17	
Materials	5	
Metal Objects.....	1	111
Platforms - Staging - Scaffolds	1	
Rock - Ore - Ground	1	
Shovels, Power	1	
Tanks	1	
Timber - Lumber - Poles	7	
Unclassified - Insufficient Data	4	
Totals.....	4	428

432

TYPE, NATURE AND SITE OF INJURY**MINES, SURFACE**

TYPE OF INJURY	Fatals	Temporary Injuries	
		Loss of one day or more	
Burns		9	
Caught in or between.....	1	20	
Fall on the same level.....		6	
Fall on different level.....		7	
Handling		25	
Inhalation - Suffocation		2	
Striking against - Struck by.....	1	27	
Slip - Stepping on		11	
Totals.....	2	107	109

NATURE OF INJURY

Foreign Bodies		4	
Cuts - Bruises - Lacerations - Punctures		50	
Strains - Sprains - Dislocations		32	
Hernias		2	
Fractures	2	11	
Amputations		1	
Burns - Scalds		8	
Occupational Diseases		1	
Totals.....	2	109	111

SITE OF INJURY

Eye		9	
Head - Face - Neck	1	7	
Trunk		33	
Upper Extremities		30	
Lower Extremities		27	
General	1	1	
Totals.....	2	107	109

MINES, UNDERGROUND**TYPE OF INJURY**

Burns		6	
Caught in or between.....	3	81	
Fall on the same level.....		18	
Fall on different level.....		28	
Handling		89	
Inhalation - Suffocation		8	
Striking against - Struck by.....	2	202	
Slip - Stepping on		45	
Unclassified - Insufficient Data		2	
Totals.....	5	479	484

TYPE, NATURE AND SITE OF INJURY—Continued

		Temporary Injuries	
		Loss of one day or more	
MINES, UNDERGROUND—Cont.	Fatals		
NATURE OF INJURY			
Foreign Bodies		25	
Cuts - Bruises - Lacerations -			
Punctures	2	229	
Strains - Sprains - Dislocations		133	
Hernias		6	
Fractures	3	84	
Amputations		5	
Burns - Scalds		5	
Occupational Diseases		1	
Nature Unknown		5	
Totals.....	5	493	498

SITE OF INJURY

Eye		34	
Head - Face - Neck		55	
Trunk	1	141	
Upper Extremities		105	
Lower Extremities		150	
General	4	4	
Insufficient Data.....		1	
Totals.....	5	490	495

QUARRIES

TYPE OF INJURY

Burns	1
Caught in or between.....	1
Fall on the same level.....	2
Fall on different level.....	2
Handling	5
Striking against - Struck by.....	12
Slip - Stepping on.....	4
Total.....	27

NATURE OF INJURY

Foreign Bodies.....	1
Cuts - Bruises - Lacerations -	
Punctures	8
Strains - Sprains - Dislocations	9
Fractures	9
Total.....	27

TYPE, NATURE AND SITE OF INJURY—Continued**QUARRIES—Cont.**

Temporary Injuries
or more
Loss of one day

SITE OF INJURY

Trunk	13
Upper Extremities	7
Lower Extremities	7
Total.....	27

MILLS AND SMELTERS**TYPE OF INJURY**

Burns	22
Caught in or between.....	9
Fall on the same level.....	4
Fall on different level.....	9
Handling	35
Inhalation - Suffocation	2
Striking against - Struck by.....	28
Slip - Stepping on.....	17
Unclassified - Insufficient Data.....	2
Total.....	128

NATURE OF INJURY

Foreign Bodies	6
Cuts - Bruises - Lacerations - Punctures	33
Strains - Sprains - Dislocations	41
Hernias	2
Fractures	20
Amputations	2
Burns - Scalds	20
Occupational Diseases	4
Total.....	128

SITE OF INJURY

Eye	10
Head - Face - Neck	12
Trunk	46
Upper Extremities	29
Lower Extremities	34
General	2
Total.....	133

TYPE, NATURE AND SITE OF INJURY—Continued

STATE AND FEDERAL PROJECTS	Temporary Injuries	
	Loss of one day or more	
Caught in or between.....	2	
Fall on same level.....	1	
Handling	2	
Striking against - Struck by.....	7	
	<hr/>	
Total.....	12	

NATURE OF INJURY

Cuts - Bruises - Lacerations -	
Punctures	7
Strains - Sprains - Dislocations	3
Fractures	2
	<hr/>
Total.....	12

SITE OF INJURY

Trunk	3
Upper Extremities	3
Lower Extremities	4
	<hr/>
Total.....	12

OIL WELLS

TYPE OF INJURY	Fatals		
Burns		26	
Caught in or between.....		99	
Fall on the same level.....		4	
Fall on different level.....		24	
Handling		63	
Striking against - Struck by.....	4	185	
Slip - Stepping on.....		23	
Unclassified - Insufficient Data.....		4	
	<hr/>	<hr/>	<hr/>
Totals.....	4	428	432

NATURE OF INJURY

Foreign Bodies		17	
Cuts - Bruises - Lacerations -			
Punctures		180	
Strains - Sprains - Dislocations		69	
Hernias		3	
Fractures	4	111	
Amputations		13	
Burns - Scalds		25	
Occupational Diseases		2	
Nature Unknown.....		8	
	<hr/>	<hr/>	<hr/>
Totals.....	4	428	432

TYPE, NATURE AND SITE OF INJURY—Continued

OIL WELLS—Cont.

SITE OF INJURY	Fatal	Temporary Injuries	
		Loss of one day or more	
Eye		27	
Head - Face - Neck	3	57	
Trunk		89	
Upper Extremities		147	
Lower Extremities		109	
General	1	1	
Insufficient Data		3	
	—	—	—
Totals.....	4	433	437

MEN EMPLOYED—1955

The number of men employed by the mineral industry again showed an increase with most of the increase in the uranium and oil areas of the State.

	Mines		Mills Smelters		Quarries Clay Mines		Placers		Proj-	Oil
	No.	Men	No.	Men	No.	Men	No.	Men	ects	Wells
District 1	88	577	34	315	19	152	2	6	247	1982
District 2	23	276	3	70	25	147	0	0	380	206
District 3	71	2355	16	1265	8	80	1	5	182	640
District 4	335	3588	12	1543	0	0	0	0	160	310
TOTALS..	517	6796	65	3193	52	379	3	11	969	3138

TOTAL MEN EMPLOYED

	Underground	Surface	Oil Wells	Totals
District 1.....	341	936	1982	3259
District 2.....	681	198	206	1085
District 3.....	1378	2286	640	4304
District 4.....	1721	3568	310	5599
TOTALS.....	4121	6988	3138	14,247

INSPECTIONS

Every effort is made by the inspectors to make an official inspection of each operating mine, quarry, plant, placer, project or oil well in the State at least once a year. In addition to this, as many follow-up inspections are made as time permits and necessity requires. In the plateau area where mines open and close between inspection trips, no doubt some are missed. However, this is the exception and the number missed is very small. This same condition exists in the oil fields. To overcome this situation, two deputy inspectors were added in July of 1955, and these inspectors were responsible partially for an increase of 188 inspections over 1954. With this additional personnel it is possible to make more thorough inspections and cover more ground.

1955 INSPECTIONS

MADE BY

MINE INSPECTORS, DISTRICTS Nos. 1, 2, 3, 4

1955	District 1 Blake	District 2 Theobald	District 3 Doyle & Keating	District 4 Ray & Pakka	Total
January	27	7	6	23	63
February	24	5	6	15	50
March	26	10	9	42	87
April	3	9	14	30	56
May	7	0	8	26	41
June	42	8	11	11	72
July	33	10	12	41	96
August	28	8	23	38	97
September	18	9	4	27	58
October	24	10	29	33	96
November	21	3	12	34	70
December	27	7	31	43	108
TOTALS.....	280	86	165	363	894

INSPECTIONS IN 1955

	Quarries Mines	Clay Mines	Mills Smelters	Placers	Projects	Oil Wells	Total
District 1	112	26	41	5	2	94	280
District 2	24	24	5	3	6	24	86
District 3	74	13	37	1	5	35	165
District 4	334	0	15	1	2	11	363
TOTALS.....	544	63	98	10	15	164	894

INFORMATION REPORTS

In order that we may have a more comprehensive report on each property inspected, an Information Report is made at least once each year on all properties. These reports are not necessarily made on active or producing properties but include prospecting and development activities as well. A short property description is given along with pertinent facts of the operation. These reports are popular with those who are inquiring as to property activity in the State. They also are an aid to the Department in compiling our annual report for employment, production and general activity.

1955 INFORMATION REPORTS

1955	Blake	Theobald	Doyle & Keating	Ray & Pakka	Total
January	3	1	8	49	61
February	2	0	0	165	162
March	5	1	1	2	9
April	1	0	21	5	27
May	7	1	15	4	27
June	10	1	15	8	34
July	22	29	14	7	72
August	28	0	24	9	61
September	7	1	10	12	30
October	13	23	7	6	49
November	13	4	5	42	64
December	32	14	23	260	329
TOTALS	146	71	143	565	925

	Mines	Quarries Clay Mines	Mills Smelters	Placers	Projects	Oil Wells	Total
District 1	60	9	25	4	1	47	146
District 2	30	28	6	2	4	1	71
District 3	71	25	14	2	10	21	143
District 4	523	3	20	3	3	13	565
TOTALS	684	65	65	11	18	82	925

TOTAL INSPECTIONS, PARTIAL INSPECTIONS AND INFORMATION DATA

District 1	District 2	District 3	District 4	Total
426	157	308	928	1,819

LIST OF OPERATING MINES IN VARIOUS COUNTIES IN COLORADO—1955

OPERATING MINES IN BOULDER COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
April Fool-Good Friday	Sugarloaf	Shipprock Uranium Corp.	Box 461, Boulder	Tungsten
Black Hope No. 1	Jamestown	Black Hope Uranium Corp.	789 S. Utica St., Denver 19	Rare Metals
Burlington	Jamestown	General Chemical Div., Allied Chemical & Dye Corp.		Fluorspar
Caribou Shaft	Caribou	Nederland Mines, Inc.	Box 228, Boulder	Zinc, Silver, Lead
Cold Springs	Nederland	Cold Springs Tungsten, Inc.	1406 Pearl St., Boulder 403 Interstate Trust Bldg., Denver 2	Tungsten
Comstock & Pandora	Caribou	Pandora Metals, Inc.	c/o Rex Bennett, General Delivery, Boulder	Lead, Silver, Zinc
Dozer	Nederland	Reynolds Tungsten Corp.	Box 16, Lawson	Tungsten
Elmer	Nederland	Stohy & Overley	Route 2, Box 444, Boulder	Tungsten
Emmett & Afterthought	Jamestown	Harry M. Williamson & Son	Box 431, Boulder	Fluorspar
Eureka	Boulder Canyon	Eureka Tungsten Co.	3255 S. Cherokee St., Engle- wood	Tungsten
Fraction	Sugarloaf	Hauck, Simms & Tomkinson	319 Pratt St., Longmont	Tungsten
Green Horn	Nederland	Elmer & Gilbert Rudine	Nederland	Tungsten
Hoosier	Nederland	Johnson Bros. & Prime	Box 336, Nederland	Tungsten
Katy & Gold Coin	Sugarloaf	John A. Jackson & Geo. T. Litsey	Nederland	Tungsten
Lucky Lady	Sugarloaf	A. L. Rogers	Sugarloaf Star Route, Boulder	Tungsten
Ohio	Sugarloaf	Harrison & Cobb & A. B. Weldon	2565 Pearl St., Boulder	Tungsten
Princess Eulalie	Millionaire	The Princess Mine	940 North St., Boulder	Tungsten
Quaker & Hildgarde	Sugarloaf	C. H. Smith	2000 Marine St., Boulder	Tungsten
Red Spruce	Jamestown	Mt. States Uranium Corp.	7340 W. Colfax Ave., Lakewood	Gold
Town Lot	Nederland	Edward Bishop	Nederland	Tungsten
Tungsten	Nederland	Tungsten Mining Co.	420 Pine St., Boulder	Tungsten
Utica	Ward	Western Uranium & Gold, Ltd.	Ward	Gold, Silver
Victory	Jamestown	Jamestown Uranium Co.	Jamestown	Uranium

OPERATING MINES IN CHAFFEE COUNTY

Josephine Lode	Buena Vista	Josephine Lode & Development Co.	Box 392, Buena Vista	Exploration
Lucky Strike Nos. 1 & 2	Turret	Volney Perry	Salida	Gold
Pilgrim Group	Monarch	Mayflower Mining & Petroleum Co.	Salida	Development
Silver King	Trout Creek Pass	George H. Sager	525 Cheyenne Blvd., Colorado Springs	Silver
Stonewall	St. Elmo	Harold Kane	Box 155, Poncha Springs	Lead, Zinc

OPERATING MINES IN CLEAR CREEK COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Alma Lincoln	Spanish Bar	Ray E. Barber	Box 781, Idaho Springs	Tourist
Anon	Spanish Bar	Spanish Bar Uranium Co.	310 Cooper Bldg., Denver 2	Uranium
Argo Tunnel	Idaho Springs	Thomas Oetter	Idaho Springs	Development
Ashland	Virginia Canyon	H. & H. Exploration Co.	Box 172, Central City	Gold, Silver, Lead, Zinc, Copper
Bald Eagle	Virginia Canyon	Bald Eagle Mining Co.	Idaho Springs	Gold, Lead, Copper
Central Gold Mine	Central City	William C. Russell, Jr.	Central City	Lead, Copper, Silver
Comstock (Red Elephant)	Lawson	Universal Oil & Uranium Corp.	7900 W. Colfax Ave., Lakewood	Lead, Copper, Silver, Zinc
Crazy Girl	Spring Gulch	Jenkins Supply & Drilling Co.	Box 371, Idaho Springs	Lead
Diamond Joe	Virginia Canyon	Timberline Mines, Inc.	Idaho Springs	Gold, Silver, Copper
Dixie	Ute Creek	LeRoy Giles & Co.	Idaho Springs	Gold
East Lake Tunnel No. 1	Virginia Canyon	George W. Crites	1345 Chase St., Lakewood	Gold, Silver, Lead, Zinc, Copper
Forge Hill Tunnel	Virginia Canyon	C. E. Morrison & Co.	Route 3, Box 367, Golden	Gold, Silver, Lead, Zinc, Copper
Freighter's Friend	Gillson Gulch	Hafen Leavitt	Idaho Springs	Silver, Lead, Zinc, Copper
Grizzly	Mt. Kelso	Greater Minerals Corp.	Georgetown	Lead, Silver
Grover	Beaverbrook Canyon	Grover Mining Co.	Evergreen	Beryl, Muscovite, Feldspar
Highlander	Spanish Bar	Dr. Fred Metz	870 Madison St., Denver 6	Lead
Humboldt Tunnel No. 3	Idaho Springs	Timberline Mines, Inc.	Idaho Springs	Gold, Silver
Jo Reynolds	Lawson	Reynolds Uranium Corp.	Box 16, Lawson	Gold, Silver, Lead, Zinc
King Cyrus	Idaho Springs	Ly'le McNulty	7021 Utica St., Westminster	Tourist
Lantern	Idaho Springs	R. F. McPherson	865 Logan St., Denver 3	Gold, Silver, Lead
Lone Star Nos. 1 & 3	Clear Creek Canyon	R. W. Carroll	Idaho Springs	Gold, Silver, Lead
Lone Star No. 6	Clear Creek Canyon	Mtn. Uranium Enterprises, Inc. of Nevada	3603 W. Colfax Ave., Denver 4	Uranium
Mattie Jack	Dumont	John T. Wilson	2415 19th St., Boulder	Silver, Lead
Miami (Wilcox Tunnel)	Idaho Springs	Colorado School of Mines, Mining Dept.	Golden	Experimental
New Hope Tunnel	Spanish Bar	John L. Stein	2034 Federal Bldg., Denver 2	Uranium, Gold, Tourist
Payne Tunnel	Empire	Empire Ridge Gold Co.	Box 174, Empire	Gold, Silver, Lead, Zinc
Peabody	Lawson	Champa Mining Co.	556 Denver Club Bldg., Denver 2	Lead, Silver, Uranium
Princess of India Tunnel	Lawson	F. S. Saum	Route 3, Golden	Silver, Lead
Smuggler	Silver Plume	Smuggler Mining Co.	Georgetown	Gold, Silver, Lead, Zinc

OPERATING MINES IN CUSTER COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Defender	White Hills	Defender Mining Co.	Silver Cliff	Silver, Lead, Zinc

OPERATING MINES IN DELTA COUNTY

Doty	Delta	Atlas Mining & Mfg. Co.	Delta	Sulphur
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OPERATING MINES IN DOLORES COUNTY

Blaine Tunnel	Rico	Rico Argentine Mining Co.	Rico	Gold, Silver, Lead, Zinc
Engel	Rico	Baer & Fabrian	Rico	Copper, Silver
Mountain Springs	Rico	Rico Argentine Mining Co.	Rico	Gold, Silver, Lead, Zinc, Copper
Payroll Tunnel	Rico	Minerals M. & M. Inc.	Rico	Silver, Lead, Zinc
St. Louis Claim	Rico	Myron L. & Paul R. Jones	Rico	Gold, Silver
St. Louis Tunnel	Rico	Rico Argentine Mining Co.	Rico	Gold, Silver, Lead, Zinc, Copper

OPERATING MINES IN EAGLE COUNTY

Eagle	Gilman	The New Jersey Zinc Co.	Gilman	Silver, Lead, Zinc, Copper
Copper King	Gypsum Canyon	Gypsum Mining Co.	Gypsum	Copper
Lucky Strike	Wolcott	Sprague & Henwood	Grand Junction	Uranium
Morning	Gold Park	Stewart & Randall	Leadville	Lead, Zinc

OPERATING MINES IN EL PASO COUNTY

Lucky Ben	Ft. Carson	Chapman & Goodwin	c/o R. R. Turkey Creek Ranch, Colorado Springs	Uranium
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OPERATING MINES IN FREMONT COUNTY

Cardon	Spikebuck	Alpha Mining & Milling Co.	Box 356, Idaho Springs	Rare Earth Minerals
Debbie Jean	Texas Creek	Dulaney Drilling Co.	Grand Junction	Uranium
Mary L. No. 1	Tallahassee	Tallahassee Uranium Co.	Box 768, Canon City	Uranium, Vanadium
Sunshine	Tallahassee	J. M. Huber Corp.	Box 831, Borger, Texas	Autunite, Uranium

OPERATING MINES IN GARFIELD COUNTY

Oil Shale Mine	Rifle	U. S. Bureau of Mines	New Custom House, Denver 2	Oil Shale
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OPERATING MINES IN GILPIN COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Banta Hill	Central City	Cherokee Uranium Mining Corp.	609 Equitable Bldg., Denver 2.	Gold, Silver, Lead
Blackhawk Lode	Silver Hill	Minerals Exploration Co. of Calif.	822 13th St., Golden.	Uranium
Blanche M.	Russell Gulch	Central Uranium & Mining Co.	Central City	Lead, Zinc, Pitchblende
Bobtail Tunnel	Black Hawk	F. R. Hollenback.	1048 Garfield St., Denver 6.	Tourist
Calhoun	Quartz Hill	Realty Uranium & Mining Co.	937 U. S. Natl. Bank Bldg., Denver 2	Gold, Silver, Lead, Zinc
Carroll	Central City	United Mining & Leasing Corp.	Box 246, Central City	Gold, Silver, Lead, Zinc, Uranium
Cherokee-Widow Woman ..	Central City	Cherokee Uranium Mining Corp.	609 Equitable Bldg., Denver 2.	Gold, Silver, Lead
Clara-Marie	Central City	United Mining & Leasing Corp.	Box 246, Central City	Gold, Silver, Lead, Zinc, Uranium
Diamond Lil Tunnel	Central City	Gilpin Mining & Historical Museum	Central City	Tourist & Development
Elk Valley Lode.....	Pleasant Valley	Victor Dent	2046 Welton St., Denver 5.	Gold, Silver, Lead, Copper
Enterprise	Black Hawk	Henry Traen & Charles Thomas.	Black Hawk	Lead
Glendale	Rollinsville	Wm. E. & G. W. Quiner		
Golden Dollar	Russell Gulch	Central Uranium & Milling Co.	Nederland	Tungsten
Good Luck & Good Luck No. 1	Silver Creek	Good Luck Mining Co.	2301 Juliet St., Aurora.	Gold
Grant	Freeman Gulch	Irving G. Williams.	4530 E. Virginia Ave., Denver 22	Gold, Copper, Titanium
Incidental	Russell Gulch	Central Uranium & Milling Corp.	Central City	Gold, Copper
Iron	Russell Gulch	Republic Gas & Uranium Co.	Box 793, Idaho Springs	Uranium
L. C. Rockwell.....	Black Hawk	Peter L. Intrery & Nilo Leonard	1155 S. Yates St., Denver 4.	Silver, Uranium
LaCrosse	Nevadaville	Glory Hole, Inc.	Central City	Gold, Silver, Lead, Zinc, Copper
Little Colonel	Black Hawk	Jack Turner	Black Hawk	Tourist
Lone Star Lode.....	Missouri Gulch	Roy Addyman	Black Hawk	Silver, Lead
Lost Gold	Central City	Faye Clapham	Central City	Tourist
Mammoth	Central City	George Kong	3205 N. Central St., Phoenix, Arizona	Tourist
Meeker Success Group	Russell Gulch	Allen Uranium Exploration Co.	1409 Washington St., Golden	Gold, Silver, Copper
Nye Mathews, Inc.	Jennie Lind	Nye Mathews, Inc.	Black Hawk	Lead, Zinc
Parker Derringer Lease ..	Black Hawk	Phillips Petroleum Co.	Bartlesville, Okla.	Molybdenum
Philadelphia	Freeman Gulch	Charles A. Slusher	Route 2, Box 413, Arvada	Uranium
Priscilla, Sunshine, Dorothy & Lena	Central City	E. & H. Exploration & Mining Co.	1547 Washington St., Golden	Uranium

OPERATING MINES IN GILPIN COUNTY—Continued

Name of Mine	Location	Operator	P. O. Address	Product
Spring Day Extension	Leavenworth Gulch			
Telegraph	Quartz Hill	Spring Day Mining Co.	Box 395, Central City	Gold, Uranium
		Gilpin County Uranium Co.	1409 Washington St., Golden	Gold, Silver, Pitchblende
Toll Gate Gold Mine	Black Hawk	Mike McNulty	Black Hawk	Tourist
Treasure Key Tunnel (Williams)	Black Hawk	Consolidated Gold & Uranium Corp.	771 17th St., Denver 2	Gold, Uranium
Two Sisters	Central City	United Mining & Leasing Corp.	Central City	Gold, Silver, Lead, Zinc, Uranium

OPERATING MINES IN GRAND COUNTY

Lucky Sunday	Gore Range	Wm. E. Holmes & Allen W. Stone	Kremmling	Gold
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OPERATING MINES IN GUNNISON COUNTY

Augusta & Micawber	Crested Butte	New-Mar Uranium Corp.	1134 Independent Ave., Grand Junction	Development
Brown Derby & Lepidolite	Parlin	U. S. Lithium Corp.	Box 143, Gunnison	Lithium
Carter, Raymonds & Stone	Ohio	Kanarado Mining & Development Co.	Ohio	Gold
Flanders Mining Co.	Gold Hill Dist.	Flanders Mining Co.	Box 861, Grand Junction	Tungsten
Gold Lynx	Gold Creek	General Minerals, Inc.	Meadows Bldg., Dallas, Texas	Gold, Silver, Lead, Zinc, Copper
Keystone	Crested Butte	American Smelting & Refining Co.	Crested Butte	Lead, Zinc, Copper
Powder Horn	Powder Horn	Minerals Engineering Co.	801 Fourth Ave., Grand Junction	Exploration
Star	Italian Mtn.	John Lambertson	Gunnison	Silver, Lead
Vulcan-Good Hope	Iola	Diamond C. Mining & Milling Co.	Box 637, Gunnison	Gold, Silver, Lead
Willow Creek	Ohio City	Willow Creek Mining Co.	524 17th St., Denver 2	Beryllium, Tantalum, Mica, Columblum, Feldspar

OPERATING MINES IN HINSDALE COUNTY

Eagle & Mary Alice Claims	North Henson Creek	American Uranium Co.	Box 150, Lake City	Uranium
Gladiator & General Sherman	Lake City	Kassell Base Metals, Inc.	Lake City	Exploration
Pelican	Lake City	M & B Mining Co.	Lake City	Gold, Silver, Lead, Zinc, Copper
Rodney No. 1	Lake City	Golden Coin Mining Co.	c/o Merritt E. Tomlinson, Box 65, Lake City	Gold, Silver, Lead
S. & M. (Second Million)	Hansen Creek	Bill Shipley	Sapinero	Uranium

OPERATING MINES IN JACKSON COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Black Bunny	Rabbit Ears	Pass. Black Bunny Mines.	Steamboat Springs	Manganese
Midget	Cowdrey	E. A. & W. R. Symington	Cowdrey	Copper
Northgate	Northgate	Ozark-Mahoning Co.	Cowdrey	Fluorspar
Alcoa Shaft	Northgate	Ozark-Mahoning Co.	Cowdrey	Fluorspar
OPERATING MINES IN JEFFERSON COUNTY				
Bob & Lee	Ralston Creek	Moskal & Co.	5509 Winthrop Ave., Chicago, Ill.	Uranium
Cavenaugh Property	Morrison	R. B. Stevenson & Co.	1592 Maple St., Golden.	Uranium, Pitchblende
Falkan Hill	Morrison	Four Corners Uranium Co.	U. S. Natl. Bank Bldg., Denver 2	Uranium
Foot Hills (Wright Lease)	Idledale	Foothills Mining Co.	635 Hawthorn Ave., Boulder	Uranium
Gary	Golden Gate	Denver Golden Oil & Uranium Co.	374 Denver Club Bldg., Denver 2	Uranium
Leyden	Leyden	Traen & Nelson	717 Illinois St., Golden.	Uranium
Lindsay Lease	Idaho Falls Hiway	Hadden Mining Co.	703 Hygiene St., Longmont.	Uranium
Mississippi Tunnel	Ralston Creek	Fred Schwartzwalder	207 Boyd St., Golden.	Uranium
Morrison	Morrison	Four Corners Uranium Co.	U. S. Natl. Bank Bldg., Denver 2	Uranium
Morrison Uranium Co.	Turkey Creek Canyon	Morrison Uranium Co.	Box 3, Morrison	Uranium
Ralston Creek	Ralston Creek	Fred Schwartzwalder	207 Boyd St., Golden.	Uranium
U. P. R. R. Oil Development Dept.	Morrison	Union Pacific Railroad.	Denver 2	Uranium

OPERATING MINES IN LAKE COUNTY

Bi-Metallic & Free Coinage.	Long Dory Hill	Louis Kostelic	Leadville	Gold, Silver, Lead
C. Ryan & Son	Climax	C. Ryan & Son	Box 7828, Climax	Development
Climax Mines	Climax	Climax Molybdenum Co.	Climax	Molybdenum
Defender	Silver Cliff	Defender Mining Co.	Silver Cliff	Silver, Lead, Zinc
Fannie Rawlins	Johnny Hill	Ellis Webster & Co.	Leadville	Gold, Silver, Lead, Zinc
Giant	Calif. Dist.	Rollo W. Shaffer, Jr.	Box 622, Climax	Silver, Pyrite
Hayden Shaft	Fryer Hill	Cadwell Mining Co.	2456 Kendall St., Denver 15	Silver, Lead, Zinc
Hazel Lode & Mary Lee	Leadville	Cecil Cassel	229 W. 6th St., Leadville	Exploration
Helena & Irene Shafts.	Iowa Gulch	Resurrection Mining Co.	Box 936, Leadville	Gold, Silver, Lead, Zinc
Ibex Nos. 2 & 4	Johnny Hill	Ellis Webster & Co.	Leadville	Gold, Silver, Lead, Zinc
Julia Fish	Iowa Gulch	Resurrection Mining Co.	Box 936, Leadville	Exploration
Resurrection No. 2	Big Evans Gulch	Robert L. Jones, Lessee.	Box 921, Leadville.	Gold, Silver, Lead, Zinc
Yak Tunnel	Calif. Gulch	Resurrection Mining Co.	Leadville	Gold, Silver, Lead, Zinc

OPERATING MINES IN LA PLATA COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Bessie G	La Plata Mtn.	Zodomok Mines, Inc.	3270 Main Ave., Durango	Gold, Silver
Lady Eleanor	La Plata Canyon	Crater Lake M. & M. Co., Inc.	Colorado Springs	Gold, Silver, Lead, Copper
Lightner Creek Group	Lightner Creek	San Juan Uranium Corp.	649 7th St., Durango	Uranium, Vanadium
Muldoon	Cumberland Mtn.	H. E. Knudson	Durango	Gold, Silver
Timbrook	Lewis Creek	Sylvania Mining & Milling Co.	1114 Security Bldg., Denver	2. Gold, Silver

OPERATING MINES IN LARIMER COUNTY

Black Hawk No. 1	Cherokee Park	Prairie Divide Uranium Co.	231 S. Grant St., Fort Collins	Tourist
Lady Moon Mine	Rustic Resort	Charles C. Kiepen	920 Woodford St., Fort Collins	Uranium

OPERATING MINES IN MESA COUNTY

Arrowhead Nos. 4 & 12	Calamity Mesa	Fred Zanett	304 Beaver Ave., Grand Junction	Uranium, Vanadium
Arrowhead No. 7	Calamity Mesa	E. C. Hughes	620 Ouray St., Grand Junction	Uranium, Vanadium
Arrowhead Nos. 14, 17, 19	Calamity Mesa	A. C. Rinderle	404 Sherman Drive, Grand Junction	Uranium, Vanadium
Arrowhead No. 18	Calamity Mesa	Dorr Phillips	Route 1, Grand Junction	Uranium, Vanadium
Austin	Beaver Mesa	Kirk Easin Uranium Co.	608 Road Ave., Grand Junction	Uranium, Vanadium
Belmont No. 1	Maverick Point	Ben Zimmerman	2940½ F Road, Grand Junction	Uranium, Vanadium
Black Mammy	Tenderfoot	G. & W. Mining Co.	Delta	Uranium, Vanadium
Blue Bird	Calamity Mesa	Mrs. Vern Kenricks	404 Sherman Drive, Grand Junction	Uranium, Vanadium
Blue Ribbon No. 1	Calamity Mesa	E. C. Hughes	1925 White Ave., Grand Junction	Uranium, Vanadium
Bonita No. 1	Blue Mesa	Bonita Uranium Co.	Reed Bldg., Grand Junction	Uranium, Vanadium
Calamity No. 6	Calamity Mesa	DeVar Shumway	215 Landsdown Road, Grand Junction	Uranium, Vanadium
Calamity Nos. 7 & 13	Calamity Mesa	Lark L. Washburn	313 Hill Drive, Grand Junction	Uranium, Vanadium
Calamity Nos. 14 & 15	Outlaw Mesa	Dan E. Kelly	Route 4, Grand Junction	Uranium, Vanadium
Calamity Nos. 21 & 27	Calamity Mesa	Vernon L. Lehr	Route 1, Grand Junction	Uranium, Vanadium
Cherokee Shaft	Beaver Mesa	Beaver Mesa Uranium Co.	Box 567, Grand Junction	Uranium, Vanadium
Chesapeake	Blue Creek	Chesapeake & Colo. Uranium Corp.	133 S. 4th Ave., Grand Junction	Uranium, Vanadium
Cliff Dweller	Calamity Mesa	Vernon Pick	U. S. Bank Bldg., Grand Junction	Uranium, Vanadium
Crow's Nest	Outlaw Mesa	William Holder	Box 1421, Grand Junction	Uranium, Vanadium
Dixie	Calamity Camp	George Charris	Rifle	Uranium, Vanadium
East Calamity No. 6	Calamity Mesa	Lark L. Washburn	313 Hill Drive, Grand Junction	Uranium, Vanadium
East Calamity No. 27	Calamity Mesa	Carl D. Tucker	Grand Junction	Uranium, Vanadium
East Queen of the Hills	Calamity Mesa	Dale Sturdevant & Harold Williams	Naturita	Uranium, Vanadium
Elizabeth No. 9	Blue Mesa	Terminal Exploration Co.	Box 431, Grand Junction	Uranium, Vanadium
Flat Top	Tenderfoot Mesa	Margaret Ruddock	Noab, Utah	Uranium, Vanadium

Government Nos. 1 & 2.....	Outlaw Mesa	Climax Uranium Co.....	Grand Junction	Uranium, Vanadium
Harvey No. 1.....	Tenderfoot	F. C. Showaker.....	Box 174, Moab, Utah.....	Uranium, Vanadium
Henderson.....	Outlaw Mesa	American Leduc Corp.....	230 N. 3rd St, Grand Junction.....	Uranium, Vanadium
Hidden Treasure.....	Calamity Mesa	Carl D. Tucker.....	Grand Valley.....	Uranium, Vanadium
Hubbard Drift.....	Beaver Mesa	Beaver Mesa Mining Co.....	Grand Junction.....	Uranium, Vanadium
Jim.....	Blue Creek	Unaweep C. C. & H. Exploration Co.....	Unaweep Canon, Whitewater.....	Uranium, Vanadium
Jody.....	Blue Mesa	Dallas Uranium & Oil Corp.....	Box 1447, Grand Junction.....	Uranium, Vanadium
Knot.....	Tenderfoot Mesa	Wright & Kincaid.....	Grand Junction.....	Uranium, Vanadium
La Sal.....	Beaver Mesa	Utahdado Mining Co.....	Box 287, Montrose.....	Uranium, Vanadium
La Sal No. 1.....	John Brown Hill	Lee Hetzel.....	Clifton.....	Uranium, Vanadium
La Sal No. 2.....	John Brown Hill	Uranium Mining Co.....	Grand Junction.....	Uranium, Vanadium
Liberty Bell.....	Tenderfoot Mesa	Leonard Foster.....	504-28 1/4 Road, Grand Junction.....	Uranium, Vanadium
Linda No. 2.....	John Brown Mesa	Richard Bell.....	Gateway.....	Uranium, Vanadium
Lost Dutchman.....	Beaver Mesa	Century Uranium Co.....	37 Wall St., New York City.....	Uranium, Vanadium
Lumsden No. 1.....	John Brown Hill	Charles V. Woodward.....	Gateway.....	Uranium, Vanadium
Lumsden No. 2.....	John Brown Hill	Ralph D. Hickman.....	Route 1, Grand Junction.....	Uranium, Vanadium
Matchless.....	Calamity Mesa	William Meese.....	Rifle.....	Uranium, Vanadium
Mesa No. 2 Inclines 1 & 2.....	Outlaw Mesa	Herbert Foster.....	1217 Colorado Ave., Grand Junction.....	Uranium, Vanadium
Mineral Channel No. 12.....	Outlaw Mesa	D. M. Phillips.....	Route 1, Grand Junction.....	Uranium, Vanadium
Neglected.....	Outlaw Mesa	Dan E. Kelly.....	Route 4, Grand Junction.....	Uranium, Vanadium
New Verde.....	Calamity Mesa	New Verde Mining Co.....	Box 1472, Grand Junction.....	Uranium, Vanadium
North Pack Rat No. 1.....	Beaver Mesa	Beaver Mesa Uranium Co.....	2701 Highway 50, Grand Junction.....	Uranium, Vanadium
Pack Rat.....	Beaver Mesa	Ventures, Inc.....	Grand Junction.....	Uranium, Vanadium
Peach No. 7.....	Outlaw Mesa	Crescent Leasing Co.....	Grand Junction.....	Uranium, Vanadium
Queen of the Hills.....	Calamity Mesa	George Charris.....	Rifle.....	Uranium, Vanadium
Rajah No. 28.....	Beaver Mesa	Beaver Mesa Uranium Co.....	Union Gulf Bldg., Grand Junction.....	Uranium, Vanadium
Rudot No. 3.....	John Brown Mesa	Trans-Mountain Uranium Co.....	Colorado Springs.....	Uranium, Vanadium
Snow Shoe, Sun & Fraction.....	Outlaw Mesa	Ralph Foster & Sons.....	1217 Colorado Ave., Grand Junction.....	Uranium, Vanadium
South Pack Rat.....	Beaver Mesa	Beaver Mesa Uranium Co.....	Union Gulf Bldg., Grand Junction.....	Uranium, Vanadium
Spring No. 1.....	Outlaw Mesa	Edward McManus.....	Box 384, Grand Junction.....	Uranium, Vanadium
Yellow Jacket No. 15.....	Calamity Mesa	Wright & Rinderle.....	404 Sherman Drive, Grand Junction.....	Uranium, Vanadium
Yellow Jacket No. 16.....	Calamity Mesa	Norman C. Wellman.....	Box 1901, Arrowhead Camp, Grand Junction.....	Uranium, Vanadium
Zanett.....	Mesa Creek	Zanett Bros.....	Ouray.....	Uranium, Vanadium

OPERATING MINES IN MINERAL COUNTY

Commodore and Amethyst.....	Creede	Creede	Lead, Zinc
Gormax No. 1.....	East Willow Creek	Emperius Mining Co.....	Exploration
Monon.....	Sunnyside Creek	Gormax Mining Co.....	Silver, Lead, Zinc
Outlet Tunnel & Phoenix Mine.....	East Willow Creek	Outlet Mining Co.....	Development

OPERATING MINES IN MOFFAT COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Gertrude No. 6	Maybell	Trace Elements Corp.	Maybell	Uranium, Vanadium

OPERATING MINES IN MONTEZUMA COUNTY

Buckeye	Cross Canyon	Buckeye Mining Co.	Box 1499, Cortez	Uranium, Vanadium
Le-Ru Mines	Cross Canyon	Le-Ru Mining Co.	Cortez	Uranium, Vanadium

OPERATING MINES IN MONTROSE COUNTY

Alta	Martin Mesa	Philip Klingensmith	Box 337, Uravan	Uranium, Vanadium
American Eagle	Little Gyp Valley	Stanley Oliver	Norwood	Uranium, Vanadium
Anna May	Monogram Mesa	J. Skalla	Norwood	Uranium, Vanadium
Aztec	Monogram Mesa	C. N. Athey & M. J. Rexroad	Naturita	Uranium, Vanadium
Badger	Martin Mesa	Keith & Don Andrews	Nuela	Uranium, Vanadium
Bauer No. 1	Atkinson Mesa	Golden Cycle Corp.	Colorado Springs	Uranium, Vanadium
Bitter Prince	Long Park	Vanadium Corp. of America	Durango	Uranium, Vanadium
Black Prince	Schvia's Pocket	F. V. Binder	Durango	Uranium, Vanadium
Bobtail	Monogram Mesa	J. Skalla	Norwood	Uranium, Vanadium
Bowen No. 1 Shaft	Atkinson Mesa	Golden Cycle Corp.	Colorado Springs	Uranium, Vanadium
Brook No. 1	Naturita	Mayfield Mining Co.	Naturita	Uranium, Vanadium
Buckhorn	Carpenter Ridge	Midwest Consolidated Uranium Corp.	750 Equitable Bldg., Denver 2	Uranium, Vanadium
Buckskin	Wedding Bell	Mike Jormon	Cortez	Uranium, Vanadium
Butterfly	La Sal Creek	Vanadium Corp. of America	Durango	Uranium, Vanadium
Camoose	Bull Canyon	Camoose Uranium Mines of America	Box 850, Uravan	Uranium, Vanadium
Cashin	La Sal Creek	Cashin Copper Corp.	Paradox	Silver, Copper
Cliff Jewellers	Atkinson Mesa	Vanadium Corp. of America	Durango	Uranium, Vanadium
Dad's	Bull Canyon	Radium King Mines, Inc.	366 S. 5th E., Salt Lake City	Uranium, Vanadium
Diana & September Morn.	Bull Canyon	Holt & Camel	Norwood	Uranium, Vanadium
Dolores	Atkinson Mesa	Tom Van Arsdale & Martin Templeton	Nuela	Uranium, Vanadium
Donald L.	Long Park	Vanadium Corp. of America	Durango	Uranium, Vanadium
Dusty	Long Park	Vanadium Corp. of America	Durango	Uranium, Vanadium
East Opera Box	Monogram Mesa	C. N. Athey & M. J. Rexroad	Naturita	Uranium, Vanadium
Echo	Bull Canyon	Bill Harrison	Moab, Utah	Uranium, Vanadium
Eureka	Carpenter Ridge	Midwest Consolidated Uranium Corp.	750 Equitable Bldg., Denver 2	Uranium, Vanadium
Evening Star No. 1 Incline	Lion Creek	George Sheehan	Telluride	Uranium, Vanadium
Evening Star No. 2 Incline	Lion Creek	Charles E. Davis	Bed Rock	Uranium, Vanadium
Fawn Springs No. 7	Bull Canyon	Vernon Moores & Robert Graham	Gateway	Uranium, Vanadium
Fawn Springs No. 12	Bull Canyon	Robert Ebbs	Nuela	Uranium, Vanadium
Firecracker	Long Park	Vanadium Corp. of America	Durango	Uranium, Vanadium
First National Bank	Long Park	Barnes Bros.	Naturita	Uranium, Vanadium

Fort No. 1.....	Long Park.....	Gold Cloud Uranium Co.....	Salt Lake City, Utah.....	Uranium, Vanadium
Fox.....	Atkinson Mesa.....	Dan E. Kelly & Robt. N. Selan.....	Route 4, Grand Junction.....	Uranium, Vanadium
Good Hope.....	Wild Cat Mesa.....	Jim Neiberg & Co.....	Nucla.....	Uranium, Vanadium
Government Block B.....	Long Park.....	D. C. Dunker.....	Nucla.....	Uranium, Vanadium
Government Blocks 3 & 4.....	Club Mesa.....	Matt & Joe Javernick & Arthur Borgeson.....	Uravan.....	Uranium, Vanadium
Great Western.....	Long Park.....	R. C. Bishop.....	Uravan.....	Uranium, Vanadium
Guadalcanal.....	Long Park.....	La Verne Ray.....	Box 256, Uravan.....	Uranium, Vanadium
Henry Clay.....	Long Park.....	John Morrill.....	Uravan.....	Uranium, Vanadium
Hidden Basin.....	Long Park.....	Vanadium Corp. of America.....	Durango.....	Uranium, Vanadium
Hobo.....	Bull Canyon.....	Naturita Mining Co.....	Box 243, Naturita.....	Uranium, Vanadium
Honeymoon Lease.....	Long Park.....	R. C. Bishop.....	Uravan.....	Uranium, Vanadium
Horsehair No. 1.....	Bull Canyon.....	Porter & Co.....	Nucla.....	Uranium, Vanadium
Hot Dog.....	Carpenter Ridge.....	Uranium Cycle & Development Co.....	1880 S. Julian St., Denver 4.....	Uranium, Vanadium
Hot Shot.....	Wedding Bell.....	Homor Rosenquist.....	Naturita.....	Uranium, Vanadium
Hummer.....	Monogram Mesa.....	Lowell Staats.....	Nucla.....	Uranium, Vanadium
J. J. Mine.....	Monogram Mesa.....	H. O. Lehr.....	Uravan.....	Uranium, Vanadium
Joker.....	Little Gyp Valley.....	Black Hawk Uranium Co.....	1136 S. State St., Salt Lake City, Utah.....	Uranium, Vanadium
Judy Ann.....	Carpenter Ridge.....	Sullivan & Rogers.....	Box 84, Norwood.....	Uranium, Vanadium
Lark.....	Bull Canyon.....	North Standard Mining Co.....	Box 66, Naturita.....	Uranium, Vanadium
LaSalle.....	Club Mesa.....	La Salle Mining Co.....	Box 217, Grand Junction.....	Uranium, Vanadium
Little Alice.....	Wild Steer Canyon.....	Fisher & Impson.....	Naturita.....	Uranium, Vanadium
Little Basin.....	Bull Canyon.....	H. H. Kincade.....	Uravan.....	Uranium, Vanadium
Little Dick.....	Atkinson Mesa.....	Frank Elder.....	Uravan.....	Uranium, Vanadium
Log Cabin.....	Bull Canyon.....	Ray Shumway.....	Moab, Utah.....	Uranium, Vanadium
Lone Pine.....	West Carpenter Ridge.....	Deyer & Goodell.....	Paradox.....	Uranium, Vanadium
Long Park No. 1.....	Long Park.....	R. D. Johnson.....	Box 235, Nucla.....	Uranium, Vanadium
Long Park No. 6.....	Long Park.....	Frank Fedel.....	Uravan.....	Uranium, Vanadium
Long Park No. 12.....	Long Park.....	E. T. Holderman.....	Uravan.....	Uranium, Vanadium
Long Shot.....	Mesa Creek.....	Jerome Craig, Sr.....	Whitewater.....	Development
Lucky Day.....	Bull Canyon.....	Elden Trone.....	Box 82, Naturita.....	Uranium, Vanadium
Mary Ann No. 4.....	Monogram Mesa.....	Joe Skalla.....	Norwood.....	Uranium, Vanadium
Mill No. 2.....	Club Mesa.....	Javernick & Borgeson.....	Uravan.....	Uranium, Vanadium
Margory Ann.....	Lions Creek.....	Paul E. Killian.....	Route 4, Box 355, Montrose.....	Uranium, Vanadium
Mineral Joe Shaft No. 1.....	Monogram Mesa.....	Climax Uranium Co.....	Grand Junction.....	Uranium, Vanadium
Mineral Joe No. 2.....	Monogram Mesa.....	Fred Richards & Son.....	Nucla.....	Uranium, Vanadium
Mineral Park No. 4.....	Long Park.....	Ambassador Oil Co.....	3161 Winthrop Ave., Ft. Worth, Texas.....	Uranium, Vanadium
Modene & Cedaridge.....	Sylvia's Pocket.....	Crown Uranium Co.....	205 Star Bldg., Casper, Wyo.....	Uranium, Vanadium
Moon Beam.....	Long Park.....	Luther Brickey & Loyd Alexander.....	Uravan.....	Uranium, Vanadium
Morning Star No. 4.....	Lions Creek.....	Mitchener & Price.....	Ouray.....	Uranium, Vanadium
North Standard.....	Bull Canyon.....	North Standard Mines.....	Moab, Utah.....	Uranium, Vanadium
North Star.....	Atkinson Mesa.....	Vanadium Corp. of America.....	Durango.....	Uranium, Vanadium

OPERATING MINES IN MONTROSE COUNTY—Continued

Name of Mine	Location	Operator	P. O. Address	Product
Old Grandad No. 2	Bull Canyon	Elba L. Wilson & Glen Gardner	Naturita	Uranium
Opera Box	Monogram Mesa	Orval Clark & Arthur Harris	Nuclea	Uranium
Ophir	Uravan	Lester Sage	Box 156, Nuclea	Uranium
Outlet Tunnel	Carpenter Flats	Neptune Uranium Corp.	2625 Walnut St., Denver 5	Uranium
Overnight	Monogram Mesa	William Barne	Uravan	Uranium
Paradox Bell	Nixon District	Frank Stocklase	Uravan	Uranium
Patty No. 5	Bull Canyon	Bob & Terry Shumway	Moab, Utah	Uranium
Pay Day	Martin Mesa	Philip Klingensmith	Box 337, Uravan	Uranium
Picket Corral	Bull Canyon	Carl Pearson	Norwood	Uranium
Point Empire	Martin Mesa	Philip Klingensmith	Box 337, Uravan	Uranium
R. A. L. No. 1	Atkinson Mesa	Great Northern Uranium Co., Inc.	Uravan	Uranium
Radium Cycle	Carpenter Ridge	Price Exploration Co.	Box 1283, Grand Junction	Uranium
Radium Queen	Carpenter Flats	Radium King Mining Co.	366 S. 5th East, Salt Lake City, Utah	Uranium
Rattlesnake	Eagle Basin	Uranium Development Co.	Santa Fe, New Mexico	Uranium
Raven	Little Gyp Valley	F. V. Binder	Durango	Uranium
Red Bird	Sylvia's Pocket	Moab Treasure Uranium	Box 452, Salt Lake City, Utah	Uranium
Red Flag	Bull Canyon	R. S. Dunn	Naturita	Uranium
Red Sox	Atkinson Mesa	B. J. Brito	Delta	Uranium
Republican	Long Park	Vanadium Corp of America	Durango	Uranium
Reserve Block No. 1	Lower Club Mesa	Bunker & Co.	Nuclea	Uranium
Rex	Lower Atkinson Mesa	H. N. LaRue	Box 432, Aztec, New Mexico	Uranium
Rim Rock	Bull Canyon	Wendell P. & Clyde Jones	Blanding, Utah	Uranium
Rim Rock Blues No. 5	Bull Canyon	Robert M. Ebbs	Nuclea	Uranium
Rogers	Rock Creek	Vanadium Corp. of America	Durango	Uranium
St. Patrick	Long Park	Clarence Neilson	Uravan	Uranium
Sandy	Uravan	Douglas Cleghorn	Box 502, Uravan	Uranium
Shamrock-Piper	Carpenter Flats	Neptune Uranium Corp.	2625 Walnut St., Denver 5	Uranium
Shattuck Denn	Club Mesa	Shattuck Denn Mining Co.	Box 878, Uravan	Uranium
Starlight No. 1	Bull Canyon	Walter E. Kingery	Box 781, Cortez	Uranium
Sunrise No. 3	Bull Canyon	Edward Smith	Naturita	Uranium
Sunrise No. 4	Bull Canyon	E. A. Berry	Naturita	Uranium
T. N. T.	Long Park	Vanadium Corp. of America	Durango	Uranium
Teapot Dome	Bull Canyon	Lee Guyman	Blanding, Utah	Uranium
Three Jacks	La Sal Creek	Vanadium Corp. of America	Durango	Uranium
Tramp No. 2	Saucer Basin	Carl B. Mangum	Monticello, Utah	Uranium
Triangulation	Long Park	R. C. Bunker	Nuclea	Uranium
Two Bits	Bull Canyon	Milton Caston	Naturita	Uranium
U. S. Grant	Saucer Basin	Tom Van Arsdale	Nuclea	Uranium
Vanadium King	Carpenter Ridge	Price Exploration Co.	Box 1283, Grand Junction	Uranium
Virgin No. 3	Long Park	O. E. Smart	Naturita	Uranium
Wedge	Long Park	H. O. Lehr	Naturita	Uranium
West	Long Park	Cecil Staats	Nuclea	Uranium
West	Bull Canyon	Couch & Trone	Box 82, Naturita	Uranium

West Opera Box.....Monogram Mesa...Clark & Harris.....Nucla.....Uranium, Vanadium
Whitney Shaft.....Long Park.....Haymaker & Morris.....Naturita.....Uranium, Vanadium
Worcester Shaft.....Uravan.....Worcester Mines.....1501 White Ave., Grand
Junction.....Uranium, Vanadium
Yellow Bird.....La Sal Creek.....Oran Moore.....Moab, Utah.....Uranium, Vanadium
Zella.....Carpenter Flats.....Oran Moore.....Moab, Utah.....Uranium, Vanadium

OPERATING MINES IN OURAY COUNTY

Beaver-Belfast.....Ironton Park.....Alexander Lease.....Ouray.....Gold, Silver, Lead,
Zinc, Copper
Camp Bird.....Ouray.....King Lease, Inc.....Ouray.....Uranium, Vanadium
Edna.....Ironton Park.....Mrs. G. W. Ballard.....Box 549, Ouray.....Exploration
Frank Hough.....Engineer Mtn.....Nu Mar Uranium Co.....Grand Junction.....Uranium, Vanadium
Keno.....Brown Mtn.....F. Richardson, G. Porter &
F. Coughlin.....Ouray.....Gold, Silver, Lead
Lost Day & Patsie.....Brown Mtn.....Earl A. Alexander.....Box 33, Ouray.....Development
Mayflower Group.....Ironton Park.....Mayflower Mining Co., Inc.....Ouray.....Gold, Silver, Lead,
Zinc, Copper
Treasury Tunnel.....Ouray.....Idarado Mining Co.....Ouray.....Lead, Zinc

OPERATING MINES IN PARK COUNTY

Betty Lode.....Guffey.....Shumway Mining Co.....Guffey.....Copper
Buckskin Joe.....Buckskin Gulch.....Buckskin Joe Mines, Ltd.....Alma.....Lead, Zinc
Champaign.....Mosquito Gulch.....Treasury Vault Uranium Corp.....508 Colorado Bldg., Denver 2.....Development
Ling.....North Star Mtn.....Cordillera Corp.....Fairplay.....Gold, Silver, Lead,
Copper
Peerless.....Hillside.....Herlacher Mining Co.....Hillside.....Gold, Silver, Copper

OPERATING MINES IN PITKIN COUNTY

Smuggler.....Aspen.....John & William Herron.....Aspen.....Uranium
Antimony.....Aspen.....Jack Bryan.....Silt.....Silver, Lead

Cliff & Creek.....Turkey Creek.....Cliff & Creek Uranium Co.....Colorado Springs.....Uranium

OPERATING MINES IN PUEBLO COUNTY

OPERATING MINES IN RIO BLANCO COUNTY

Burrell Nos. 1 & 3.....Meeker.....Tungsten Uranium Co.....Meeker.....Uranium
Coal Creek No. 1.....Uranium Peak.....Gulf Coast Western Oil Co.....916 Republic Bldg., Oklahoma
City, Okla.....Uranium
M. G. Mine.....Uranium Peak.....Iowa Uranium Co.....2770 Speer Blvd., Denver 11.....Uranium
Kimrock (Toni-Jo).....Uranium Peak.....Rimrock Tidelands, Inc.....Room 16, Uranium Center,
Grand Junction.....Uranium, Vanadium
Sleepy Cat.....Meeker.....Marcy Exploration & Mining Co.....Meeker.....Uranium, Vanadium

OPERATING MINES IN SAGUACHE COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Bennett Group	Copper Gulch	Bennett Mining Co.	Box 105, Villa Grove.	Development
Bonanza	Bonanza	National Consolidated Corp.	Salida	Exploration
Bonita	Poncho Pass	D. & J. Uranium & Exploration Co.		
Cocomongo	Bonanza	Bonanza Consolidated Mining Co.	325 N. Santa Fe Ave., Pueblo.	Exploration
Dependable No. 9	Cochetopa	S. W. U. Mining Co.	Bonanza	Lead, Zinc
East (MAT)	Cochetopa	Gunnison Mining Co.	Saguache	Gold, Silver, Uranium, Vanadium
Jennie	Rawley Mt.	Wycol Minerals, Inc.	Gunnison	Uranium
K. O. Mine	Villa Grove	Ole Olson	Saguache	Gold, Silver, Lead, Zinc
Los Ochos	Cochetopa	Gunnison Mining Co.	Villa Grove	Development
M. & W. Mine	Cochetopa	M. & W. Mining Co.	Gunnison	Uranium
Marie Lode	Kerber Creek	Warwick Mine Trust	Gunnison	Uranium, Gold
Navajo	Copper Gulch	Navajo Mine Trust	Villa Grove	Silver, Lead
Oregon	Bonanza	Nick Kesserick	Villa Grove	Silver, Lead, Copper
Pikeview Uranium	Wild Cherry Creek	Pikeview Uranium Co.	Salida	Development
Queen City	Bonanza	D. W. Schmidt	Moffat	Uranium
Rawley	Bonanza	W. J. Costello	Box 105, Villa Grove.	Exploration
Vallejo	Sosthenes Gulch	Johnston Mining Co.	Bonanza Route, Villa Grove.	Silver, Copper, Lead, Zinc
Villa Grove	Turquoise Lode	Monless C. Winfield	Bonanza	Lead
Warwick	Rawley Gulch	Nick Kesserick	Villa Grove	Turquoise
Whale	Bonanza	W. O. Fortenberry	Salida	Development
			Victoria Hotel, Alamosa.	Silver, Lead, Copper

OPERATING MINES IN SAN JUAN COUNTY

Black Hawk	Gladstone Creek	Argyle Mining & Milling Corp.	Silverton	Gold, Silver, Lead, Copper
Gold King	Silverton	Gold King Development Co., Inc.	Box 186, Silverton	Gold, Silver, Lead, Zinc, Copper
Graysill	Hermosa Park	Vanadium Corp. of America.	Durango	Uranium, Vanadium
Lark	Dry Gulch	P. H. Ruhter	Silverton	Gold, Silver, Lead, Copper, Zinc
Lead Carbonate	Silverton	Wyoming Tungsten Mines Co., Inc.	Silverton	Lead, Zinc
London	Animas Forks	Wm. O. Eriksson	Silverton	Gold, Silver, Lead, Zinc, Copper
Longfellow Shaft	Red Mtn. Pass.	S. M. Kaemmerling	c/o John W. Shireman, Equitable Bldg., Denver 2.	Lead, Zinc
Lucky Jack	Mineral Point	Tech-Ser Mining Co.	Box 517, Silverton	Lead, Zinc
Mogul	Cement Creek	Grant Gifford	Silverton	Gold, Silver, Lead, Zinc, Copper
Norma Jean	Middle Mineral Creek	H. & G. Mining Co.	Silverton	Gold, Silver, Lead, Copper

Osceola	Cunningham Gulch	Tech-Ser Mining Co.....	Box 517, Silverton	Gold, Silver, Lead, Zinc, Copper
Pride of the West.....	Cunningham Gulch	Parney Blackmore & Assoc.....	Silverton	Gold, Silver, Lead, Zinc, Copper
Silver Ledge	Mineral Creek	Tech-Ser Mining Co.....	Box 517, Silverton	Lead, Zinc
Vay Claims	Coalbank Hill	Henry C. Worley.....	1 LaPlata Place, Durango.....	Uranium

OPERATING MINES IN SAN MIGUEL COUNTY

Andrus	Ingram Basin	Egan Norlander	Ouray	Gold, Silver, Lead, Copper
April No. 1.....	Slick Rock	Four Corners Exploration Co.....	1118 Main St., Grand Junction.....	Uranium, Vanadium
Bear Creek	Bear Creek	Vanadium Corp. of America.....	Durango	Uranium, Vanadium
Blue Creek	Slick Rock	Jim Gray	Naturita	Uranium, Vanadium
Bradley	Savage Basin	Utao Uranium, Inc.	Box 113, Moab, Utah.....	Lead, Zinc
Bull Snake No. 3.....	Horse Shoe Bend.....	Uranium Producers, Inc.	Denver	Uranium, Vanadium
Burrow Shaft No. 3.....	Slick Rock	Albert Fish, Joe Weaver & Sam Johnson	Box 471, Telluride	Exploration
Canfield	Slick Rock	A. H. Canfield.....	Dove Creek	Uranium, Vanadium
Charles P.	Slick Rock	Roy Kamholz	Egnar	Uranium, Vanadium
Cougar Group	Slick Rock	Henry Holling	Egnar	Uranium, Vanadium
Crescent City	Deer Creek	E. A. Short.....	Placerville	Gold, Silver, Lead, Zinc, Copper
Ellison	Slick Rock	Union Uranium Co.....	Grand Junction	Uranium, Vanadium
Elouisa	Slick Rock	McCormick Mining Co.....	Dove Creek	Uranium, Vanadium
Falcon No. 1.....	Slick Rock	Uranium Metals, Inc.	Egnar	Uranium, Vanadium
Full Moon No. 1.....	Slick Rock	George Hazen	Egnar	Uranium, Vanadium
Gerageto	Slick Rock	Uranium, Inc.	Moab, Utah	Uranium, Vanadium
Geord T.	Slick Rock	Intermountain Uranium Co.....	Monticello, Utah.....	Uranium, Vanadium
Governor	Bishop Canyon	Equitable Uranium Co.....	1485 Boston St., Aurora.....	Uranium, Vanadium
Grants & Black Fox.....	Slick Rock	R. L. Duncan	Dove Creek	Uranium, Vanadium
Groundhog	Wedding Bell	Crites Bros.....	Cortez	Uranium, Vanadium
Grunwald	Placerville	Grunwald Mining Corp.....	Placerville	Uranium, Vanadium
Hangover	Slick Rock	Mike Doyle	Box 1433, Grand Junction.....	Uranium, Vanadium
Happy Jack	Lishon Valley	Richard Dillon	Box 1412, Cortez.....	Uranium, Vanadium
Hawkeye	Slick Rock	Ute Uranium Corp.....	210 Arapahoe St., Boulder.....	Uranium, Vanadium
Helen	Slick Rock	San Juan Leasing Co.....	Montrose	Uranium, Vanadium
Herbert Claim	Slick Rock	Foster Bros.....	Egnar	Uranium, Vanadium
Hogback & France.....	Slick Rock	Bishop Canyon	Box 333, Dove Creek.....	Uranium, Vanadium
Horse Shoe No. 1.....	Horse Shoe Bend.....	Ouray Uranium Co.....	Moab, Utah	Uranium, Vanadium
Horse Shoe No. 5.....	Horse Shoe Bend.....	N. Reck & A. Valerio.....	Box 95, Cortez.....	Uranium, Vanadium
Horse Shoe No. 7.....	Horse Shoe Bend.....	Ferrol Gordon	Egnar	Uranium, Vanadium
Hot Shot No. 11.....	Dolores Canyon	United Uranium Corp.....	1608 Broadway, Denver 2.....	Uranium
Hot Shot No. 2.....	Wedding Bell	Homor Rosenquist	Naturita	Uranium, Vanadium
Iron Springs Placer.....	Ophir	C. K. Williams & Co.....	2001 Lynch Ave., E. St. Louis, Ill.	Uranium, Bog Iron

OPERATING MINES IN SAN MIGUEL COUNTY—Continued

Name of Mine	Location	Operator	P. O. Address	Product
Jack Knife Nos. 1 & 3	Wedding Bell	Four Corners Uranium Corp.	U. S. Natl. Bank Bldg., Denver 2	Uranium, Vanadium
Joe Dandy	Saw Pit	Colorado-Utah Uranium & Mining Co.	Newhouse Bldg., Salt Lake City, Utah	Uranium, Vanadium
Joker	Slick Rock	Black Hawk Uranium & Metals Co.	136 S. State St., Salt Lake City, Utah	Uranium
Katydid	Steamboat Mtn.	Skyline Uranium Co.	3424 E. Colfax Ave., Denver 6	Uranium
Last Chance	McIntyle Canyon	T. J. Doerrie	Box 843, Moab, Utah	Uranium, Vanadium
Legin Group	Slick Rock	Slidmore Mining Co.	Dove Creek	Uranium, Vanadium
Legin Lease	Slick Rock	Ortmayer Mining Co.	Egnar	Uranium, Vanadium
Leopard No. 3	Leopard Creek	Uranium Corp. of America	Durango	Uranium, Vanadium
Lone Park No. 2	Spud Patch	Yankee Canuck Mines	Box 127, Moab, Utah	Uranium, Vanadium
Long Ridge	Big Gypsum	W. H. Hardin & K. N. Platz	Redvale	Uranium
Lost Brothers	Bull Canyon	Crown Uranium Co.	412 Wyoming Natl. Bank Bldg., Casper, Wyo.	Uranium, Vanadium
Main Street No. 1	Wedding Bell	Four Corners Uranium Co.	U. S. Natl. Bank Bldg., Denver 2	Uranium, Vanadium
Main Street No. 2	Wedding Bell	Nickerson & Brooks	515 S. Junction Ave., Montrose	Uranium, Vanadium
Marie	Bishop Canyon	Bishop Canyon Uranium Co.	Dove Creek	Uranium, Vanadium
Mary Jane & Broadway	Bull Canyon	L. H. Wilkerson	Box 605, Grand Junction	Uranium, Vanadium
Meldrum Tunnel	Telluride	Telluride Mines, Inc.	Telluride	Gold, Silver, Lead, Zinc, Copper
Morning Glory	Gypsum Valley	W. H. Hardin & K. N. Platz	Redvale	Uranium, Vanadium
Old Stag	Leopard Creek	Universe Uranium Co.	240 Josephine St., Denver 6	Uranium, Vanadium
Owenby Group (A.E.C. Lease)	Slick Rock	Dulaney Mining Co.	312 First Natl. Bank Bldg., Grand Junction	Uranium, Vanadium
Owenby Group (Dulaney)	Slick Rock	Dulaney Mining Co.	312 First Natl. Bank Bldg., Grand Junction	Uranium, Vanadium
Parrot Mines	Slick Rock	Parrot Mining Co.	Box 475, Montrose	Uranium, Vanadium
Patchfork No. 1	Big Gypsum Valley	Petroleum Uranium Co.	Grand Junction	Uranium, Vanadium
Pond	Big Gypsum Valley	W. H. Hardin & K. N. Platz	Redvale	Uranium, Vanadium
Prospectors Fortune	Island Mesa	Donanza Oil & Uranium Corp.	1312 Davis Bldg., Dallas, Texas	Uranium, Vanadium
R. A. L. No. 1	Atkinson Mesa	Great Northern Uranium Co., Inc.	Uravan	Uranium, Vanadium
Radium Group (A.E.C. Lease)	Slick Rock	Dulaney Mining Co.	312 First Natl. Bank Bldg., Grand Junction	Uranium, Vanadium
Radium Group (Dulaney)	Slick Rock	Dulaney Mining Co.	312 First Natl. Bank Bldg., Grand Junction	Uranium, Vanadium
Redwing	Big Gypsum Valley	G. & M. Mining Corp.	402 Main St., Kerrville, Texas	Uranium, Vanadium
Roger Nos. 1, 2, 5	Slick Rock	Roy Kamholz	Egnar	Uranium, Vanadium

Roy Lee	Horse Shoe Area.	Parrot Mining Co.	Box 475, Montrose.	Uranium, Vanadium
San Juan	Slick Rock	San Juan Leasing Co.	Box 547, Montrose.	Uranium, Vanadium
Silver Bell, Badger & Carribeau	Ophir Loop	Silver Bell Mines Co.	Ophir	Lead, Zinc
Space Ship No. 1	Horse Shoe Bend.	Uranium Producers, Inc.	Denver	Uranium, Vanadium
Strawberry Roan	Bishop Canyon	Jack Kern	Egnar	Uranium, Vanadium
Summit	Slick Rock	Arthur Canfield	Box 118, Dove Creek.	Uranium, Vanadium
Sunnyside	Slick Rock	Burnett & Co.	Box 1357, Cortez.	Uranium, Vanadium
Tail Hold	Slick Rock	Burwell Mining Co.	104 Teller St., Grand Junction.	Uranium, Vanadium
Telluride Mines, Inc.	Telluride	Telluride Mines, Inc.	Telluride	Lead, Copper, Zinc
Tiny	Big Gypsum Valley	Troy E. Wade & Loyd Rainwater.	Nucila	Uranium, Vanadium
Vanadium Queen	Slick Rock	Richard Dillon	Box 1412, Cortez.	Uranium, Vanadium
Veta Mad & Veta Glad (Gayno)	Slick Rock	Gayno Mining Co.	Box 547, Montrose.	Uranium, Vanadium
Uncle Sam	Big Gypsum Valley	Harold Kincaide	Redvale	Uranium, Vanadium
Utah	Slick Rock	Dan Kelly & Cy Tucker	Rt. 4, Grand Junction.	Uranium, Vanadium
Wally No. 1	Slick Rock	Bertoch Mines	Box 65, Egnar	Uranium, Vanadium
West End	Wedding Bell	Four Corners Uranium Co.	U. S. Natl. Bank Bldg., Denver 2	Uranium, Vanadium
Wimpy	Spud Patch	Oddie Gross	Cortez	Uranium, Vanadium

OPERATING MINES IN SUMMIT COUNTY

Alliance Group	Breckenridge	Robert C. Moffit.	Box 389, Canon City.	Gold, Silver, Lead
Big Four	Green Mtn. Dam.	Silver Bull Mining Co.	520 W. Third St. Pueblo.	Silver, Lead, Zinc
Boss	Dillon	Boss Mining Co.	194 W. Dakota, Denver 23.	Silver, Lead, Zinc
Chataqua	Montezuma	Montezuma Uranium Co.	Montezuma	Gold, Silver, Lead, Zinc
Minnie	Breckenridge	Dr. Frank Gross & W. L. Davenport	Breckenridge	Development
Silver Wing & Meteor	Montezuma	Burke Martin Mines, Inc.	Montezuma	Silver, Lead, Zinc
Wellington	Breckenridge	Horn & Burger	Breckenridge	Gold, Silver, Lead, Zinc

OPERATING MINES IN TELLER COUNTY

Ajax	Battle Mtn.	Golden Cycle Corp.	Box 127, Cripple Creek.	Gold
Cresson	Raven Hill	Cresson Consolidated Gold M&M Co.	Box 127, Cripple Creek.	Gold
Deadwood	Bull Hill	Deadwood Leasing Co.	Cripple Creek	Gold
El Paso Dump	Cripple Creek	Copeland & Knight.	Cripple Creek	Gold
Grace Greenwood	Beacon Hill	Greenwood Leasing Co.	Cripple Creek	Gold
Henry Adney	Beacon Hill	John Robush & Co.	Cripple Creek	Gold
Mollie Kathleen	Tenderfoot Hill.	Mollie Kathleen Mining Co.	Box 1, Florissant.	Tourist
Old Gold	Beacon Hill	John Robush & Co.	Cripple Creek	Gold
Strong	Victor	Front Range Mines, Inc.	1535 Welton St., Denver 2.	Gold

OPERATING QUARRIES IN BOULDER COUNTY

Name of Quarry	Location	Operator	P. O. Address	Product
Brodie's St. Vrain	Lyons	K. C. Brodie	Box 325, Lyons.	Sandstone
Hall & Ingersoll	Lyons	University of Colorado	Boulder	Sandstone
Ohline	Lyons	Jacobson & Evans Stone Co.	Box C, Lyons.	Sandstone
Summers	Lyons	Dewey H. Summers	Lyons	Sandstone

OPERATING QUARRIES IN CHAFFEE COUNTY

Blue Brute	Ute Trail	Silver Rucker Mining & Development Co.	Salida	Fluorspar, Beryl, Mica
Crystal Stone Placer	Ute Trail	Colorado Granite Co.	Salida	Granite
Homestake	Ute Trail	Magnuson & Sons	Box 671, Salida.	Feldspar
Humpy	Canon City	Colonna & Co. of Colo., Inc.	Box 387, Canon City	Marble
Monarch Lime Quarry	Salida	Colo. Fuel & Iron Corp.	Garfield	Limestone
Rock King	Ute Trail	Harvey S. Moyer	Box 742, Salida	Feldspar, Beryl
Warner's Quarry	Ute Trail	James Warner	Rainbow Bldg., Salida	Granite

OPERATING QUARRIES IN CUSTER COUNTY

Green	Rosita	Great Lakes Carbon Corp.	Florence	Perlite
Hillside	Hillside	Colorado Aggregate Co.	Florence	Heavy Aggregate

OPERATING QUARRIES IN EAGLE COUNTY

Colo-Tex Stone Co.	Basalt	Colo-Tex Stone Co.	Box 401, Glenwood Springs	Flagstone
Dotsero Cinder Co.	Gypsum	Lee Gotschall	Box 128, Gypsum	Volcanic Cinders
Roaring Fork	Carbondale	E. H. Bone	Carbondale	Pumice

OPERATING QUARRIES IN EL PASO COUNTY

Lennox Breed	Pikeview	Colorado Materials Co.	Box 183, Colorado Springs	Crushed Rock
Castle	Colorado Springs	Castle Concrete Company, Inc.	Box 2462, Colorado Springs	Concrete Aggregate

OPERATING QUARRIES IN FREMONT COUNTY

American Crystal Underground Quarry	Taylor Gulch	Frank H. Norberg	703 U. S. Natl. Bank Bldg., Denver 2	Limestone
Burnito	Canon City	Ray Sturbaum & Son	Canon City	Glanister, Sand
Calcite No. 4	Howard	Colorado Limestone Co.	Box 8, Howard	Limestone
Canon Dolomite Quarry	Canon City	The Colorado Fuel & Iron Corp.	Canon City	Dolomite
Coaldale	Coaldale	Natalino Senatore	1810 Franklin Ave., Canon City	Gypsum Rock
Colorado Limestone Quarry	Howard	Colorado Limestone Co.	Howard	Crushed Rock
Cowan Travertine Quarry	Canon City	Cowan Brothers	227 Main St., Canon City	Travertine

Delano	Texas Creek	Coleman Brothers	807 Allison St., Canon City	Monumental Granite
Devil's Hole	Texas Creek	Kenneth R. Cox	Box 431, Canon City	Feldspar, Mica, Beryl, Quartz
English	English Siding	Colonna & Co. of Colorado, Inc.	Box 387, Canon City	Marble
Horney Ganister Quarry	Temple Canyon	Ralph J. Pierce	108 Pennsylvania St., Canon City	Ganister
Iron Mountain	Pine Gulch	Fremont Construction Co.	Florence	Heavy Aggregate
Mica Lode Quarry	Canon City	Alex Lockhart & Sons	Canon City	Feldspar, Mica, Beryl

OPERATING QUARRIES IN GARFIELD COUNTY

Glenwood Springs Lime Quarry	Glenwood Springs	Frank H. Norberg Co.	703 U. S. Natl. Bank Bldg., Denver 2	Limestone
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OPERATING QUARRIES IN GUNNISON COUNTY

Colorado Yule-Lower Strouse	Marble	Basic Chemical Corp.	Box 270, Glenwood Springs	Calcitic Marble
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OPERATING QUARRIES IN JEFFERSON COUNTY

Calvin Palmer	Golden	Calvin Palmer	603 Iowa St., Golden	Red Rock Gravel
Little Duzy	Morrison	R. B. Stevenson & Co.	Box 236, Morrison	Carnotite

OPERATING QUARRIES IN LARIMER COUNTY

Boettcher	La Porte	Ideal Cement Co.	Box 579, Ft. Collins	Limestone, Sand
Rex	Owl Canyon	Frank H. Norberg Co.	703 U. S. Natl. Bank Bldg., Denver 2	Limestone

OPERATING PEAT BOGS IN BOULDER COUNTY

Name of Bog	Location	Operator	P. O. Address	Product
Green Thumb Peat Bog	Nederland	Green Thumb Peat Moss Co.	312 C. A. Johnson Bldg., Denver 2	Peat
Mud Lake Peat Bog	Nederland	Donald Scruggs	510 Maxwell St., Boulder	Peat

OPERATING PEAT BOGS IN GILPIN COUNTY

Braecher Ranch Peat Bog	Blackhawk	Braecher Ranch Co.	Route 2, Box 79, Golden	Peat
Rudolph's Peat Bog	The Gap	Gus Rudolph	Black Hawk	Peat

OPERATING PEAT BOGS IN TELLER COUNTY

Divide Peat Bog	Divide	Natural Resources, Inc.	2605 W. Colorado Ave., Colorado Springs	Peat
Bison Peat Bog	Pikes Peak Area	Natural Resources, Inc.	2605 W. Colorado Ave., Colorado Springs	Peat

OPERATING CLAY MINES AND PITS IN DOUGLAS COUNTY

Name of Mine	Location	Operator	P. O. Address	Product
Hogback	Waterton	Robinson Brick & Tile Co.	500 Santa Fe Drive, Denver 4.	Clay
Stevens Ranch	Castle Rock	Stroud Wisenhunt	Castle Rock	Clay
Helmer Clay Mine	Littleton	T. L. Helmer	Littleton, Box 94	Clay
Hillside	Waterton	Colorado Aggregate Co.	Florence	Clay

OPERATING CLAY MINES AND PITS IN EL PASO COUNTY

Hecla	Husted	Glen A. Scribner	Route 3, Colorado Springs	Clay
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OPERATING CLAY MINES AND PITS IN FREMONT COUNTY

Flint Nos. 1 & 2	Canon City	C. E. Goodale	712 N. 9th St., Canon City	Clay
Freeman No. 3	Red Creek	Ed Freeman	Stone City	Clay

OPERATING CLAY MINES AND PITS IN JEFFERSON COUNTY

Cannon	Arvada	Denver Terra Cotta Co.	Arvada	Plastic Clay
Chiefain	Denver	Robinson Brick & Tile Co.	500 S. Santa Fe Drive, Denver 4	Plastic Clay
Geo. W. Parfet Sample Pit	Golden	Geo. W. Parfet Estate, Inc.	Linder Block, Golden	Clay
Johnson	Golden	The Denver Sewer Pipe & Clay Co.	Route 3, Box 368, Golden	Fire Clay
Lakewood Brick Co.	Golden	Charles Simpsons	613 17th St., Golden	Plastic Clay
Lexden Clay Mine	Golden	Ena Bennetts	Route 2, Box 236, Golden	Clay
Morrison Clay Pit	Morrison	E. M. E. Clay Haulers, Inc.	170 Utica St., Denver 19	Clay
North Golden Clay Mine	Golden	The Denver Fire Clay Co.	2301 Blake St., Denver 5	Flint Clays
Rockwell & Apex	Golden	Geo. W. Parfet Estate, Inc.	Linder Block, Golden	Clay
Ruby	Golden	H. M. Rubey Clay Co.	Linder Block, Golden	Fire Clay
Strainland	Golden	Denver Sewer Pipe & Clay Co.	Route 3, Box 368, Golden	Clay

OPERATING CLAY MINES AND PITS IN LAS ANIMAS COUNTY

Santa Fe Mine	Starkville	Scott-Ruiz Coal Co.	Starkville	Clay
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OPERATING CLAY MINES AND PITS IN PUEBLO COUNTY

Chamblin Clay Mine	Capors Spur	Standard Fire Brick Co.	24th & Albany Sts., Pueblo	Fire Clay
Freeman	Rock Creek	Rocky Mountain Fire Clay Co.	Stone City	Clay
Nellie Helen	Stone City	Arthur L. Wauds	Stone City	Clay
Rock Creek Clay Mine	Rock Creek	The Standard Fire Brick Co.	24th & Albany Sts., Pueblo	Fire Clay
Stone City No. 1	Stone City	Pueblo Clay Products Co.	Box 1657, Pueblo	Clay
Stone City No. 2	Stone City	Pueblo Clay Products Co.	Box 1657, Pueblo	Clay
Stone City No. 3 (Spring Canyon)	Stone City	Pueblo Clay Products Co.	Box 1657, Pueblo	Clay
Stone City No. 4 (Meadow Mine)	Stone City	Pueblo Clay Products Co.	Box 1657, Pueblo	Clay

OPERATING MILLS, PLANTS AND SMELTERS IN ADAMS COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
North Plant	Denver	Cooley Gravel Co.	6101 Lowell Blvd., Denver 11.	Gravel, Gold, Silver
Plant No. 8	Denver	Brannan Sand & Gravel Co.	4800 Brighton Blvd., Denver 16.	Rock, Gravel
Plant No. 10	Denver	Brannan Sand & Gravel Co.	4800 Brighton Blvd., Denver 16.	Rock, Gravel
Plant No. R	Denver	Brannan Sand & Gravel Co.	4800 Brighton Blvd., Denver 16.	Rock, Gravel

OPERATING MILLS, PLANTS AND SMELTERS IN ARAPAHOE COUNTY

Globe Plant	Denver	Cooley Gravel Co.	6101 Lowell Blvd., Denver 11.	Gravel
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OPERATING MILLS, PLANTS AND SMELTERS IN BOULDER COUNTY

Comstock Mill	Grand Island	Pandora Metals, Inc.	c/o Rex Bennett, General Delivery, Boulder	Development
Jump Mill	Sugarloaf	Shiprock Uranium Corp.	Box 461, Boulder	Tungsten
Lakewood Mill	Nederland	Cobb & Weldon	401 Pine St., Boulder	Fluorspar
Marion Mill	Sugarloaf	Wah Chang Corporation	Woolworth Bldg., New York City	Tungsten
Pastore Placer	Nederland	James Pastore	1946 Walnut St., Boulder	Tungsten
Valmont Mill	Valmont	General Chemical Division, Allied Chemical & Dye Corp.	Box 228, Boulder	Fluorspar
Wano	Jamestown	Ozark-Mahoning Co.	Jamestown	Fluorspar
Wolf Tongue	Nederland	Cold Springs Tungsten, Inc.	1636 First Natl. Bank Bldg., Denver 2	Tungsten

OPERATING MILLS, PLANTS AND SMELTERS IN CHAFFEE COUNTY

Monarch Crushing Plant	Monarch	The Colorado Fuel & Iron Corp.	Box 489, Salida	Limestone
Western Feldspar Mill	Salida	Western Feldspar Milling Co.	Box 671, Salida	Feldspar

OPERATING MILLS, PLANTS AND SMELTERS IN CLEAR CREEK COUNTY

Lupton Mill	Georgetown	Greater Minerals Corp.	Georgetown	Silver, Lead
Silver Spruce Mill	Idaho Springs	Alpha Mining & Milling Corp.	Idaho Springs	Samarските Ores

OPERATING MILLS, PLANTS AND SMELTERS IN CUSTER COUNTY

Turner-Norton Mill	Silver Cliff	Turner Machine Shop	Silver Cliff	Lead, Zinc
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OPERATING MILLS, PLANTS AND SMELTERS IN DENVER COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Consolidated Feldspar	Denver	International Minerals & Chemical Co.	1333 W. Maple Ave., Denver 23. Feldspar	
Globe Plant	Denver	American Smelting & Refining Co.	803 First Natl. Bank Bldg., Denver	Cadium
Denver Chemical Works	Denver	General Chemical Division, Allied Chemical & Dye Corp.	1271 W. Bayaud Ave., Denver 23	Pyrite Concentrates

OPERATING MILLS, PLANTS AND SMELTERS IN DOLORES COUNTY

Rico Argentine Mill	Rico	Rico Argentine Mining Co.	Rico	Lead, Zinc
Rico Sulphuric Acid Plant	Rico	Rico Argentine Mining Co.	Rico	Sulphuric Acid

OPERATING MILLS, PLANTS AND SMELTERS IN EAGLE COUNTY

Eagle Mill	Gilman	The New Jersey Zinc Co.	Gilman	Lead, Zinc
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OPERATING MILLS, PLANTS AND SMELTERS IN FREMONT COUNTY

Canon City Mill	Canon City	The New Jersey Zinc Co.	Canon City	Zinc
Portland Cement Plant	Canon City	Ideal Cement Co.	Box 231, Florence	Cement
Portland Plaster Mill	Portland	Ideal Cement Co.	Box 231, Florence	Plaster

OPERATING MILLS, PLANTS AND SMELTERS IN GARFIELD COUNTY

Oil Shale Plant	Rifle	U. S. Bureau of Mines	New Custom House, Denver 2	Oil Shale
Union Carbide Nuclear Mill	Rifle	Union Carbide Nuclear Co.	Rifle	Uranium, Vanadium

OPERATING MILLS, PLANTS AND SMELTERS IN GILPIN COUNTY

Dula Jena (Golden Gilpin)	Black Hawk	Royal Mine & Milling Co.	Box 571, Loveland	Gold, Silver, Zinc, Lead
Gold Ridge Mill	Central City	Cherokee Uranium Mining Corp.	609 Equitable Bldg., Denver 2	Gold, Silver, Lead, Copper, Zinc
Royal Mill	Black Hawk	L. J. Egg	Blackhawk	Ferberite
United Mining & Leasing Corp. Mill (Hoodie)	Central City	United Mining & Leasing Corp.	Box 246, Central City	Uranium, Gold, Silver, Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS IN GUNNISON COUNTY

Keystone	Crested Butte	American Smelting & Refining Co.	Crested Butte	Lead, Zinc
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OPERATING MILLS, PLANTS AND SMELTERS IN JACKSON COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Black Bunny	Rabbit Ears Pass	Black Bunny Mining Co.	Steamboat Springs	Manganese
Northgate	Northgate	Ozark-Mahoning Co.	Cowdrey	Fluorspar

OPERATING MILLS, PLANTS AND SMELTERS IN JEFFERSON COUNTY

Asphalt Paying Co.	Wheatridge	Horace C. Fulkerson	Box 127, Wheatridge	Mixed Hot Asphalt
Beryl Ores Co.	Arvada	Beryl Ores Co.	Box 409, Route 1, Arvada	Beryl, Mica
Plant No. 11	Wheatridge	Brannan Sand & Gravel Co.	4800 Brighton Blvd., Denver 16	Rock, Gravel

OPERATING MILLS, PLANTS AND SMELTERS IN LAKE COUNTY

Arkansas Valley Smelter	Leadville	American Smelting & Refining Co.	803 First Natl. Bank Bldg., Denver 2	Gold, Silver, Lead
Climax Mills	Climax	Climax Molybdenum Corp.	Climax	Molybdenum, Tungsten, Pyrite, Th
Lincoln Mine & Mill	Pyans Gulch	Lincoln Mining & Milling Co.	106 Harrison Ave., Leadville	Lead-Zinc Concentrates
Resurrection Mill	Calif. Gulch	Resurrection Mining Co.	Box 936, Leadville	Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS IN LA PLATA COUNTY

Vanadium Corp. of America (Durango Plant)	Durango	Vanadium Corp. of America	Durango	Uranium, Vanadium
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OPERATING MILLS, PLANTS AND SMELTERS IN LARIMER COUNTY

Boettcher Plant	La Porte	Ideal Cement Co.	Box 579, Fort Collins	Cement
Sterling Sand & Gravel Co., Stationary Crushing Plant	Fort Collins	Sterling Sand & Gravel Co.	Route 3, Box 560, Fort Collins	Concrete

OPERATING MILLS, PLANTS AND SMELTERS IN MESA COUNTY

A. E. C. Plant	Grand Junction	Atomic Energy Commission	Grand Junction	Uranium
Climax Uranium Mill	Grand Junction	Climax Uranium Co.	Grand Junction	Uranium

OPERATING MILLS, PLANTS AND SMELTERS IN MINERAL COUNTY

Emperius Mill	Creede	Emperius Mining Co.	Creede	Lead, Zinc
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OPERATING MILLS, PLANTS AND SMELTERS IN MONTEZUMA COUNTY

Nielson's, Inc.	Dolores	Nielson's, Inc.	Dolores	Sand, Gravel
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OPERATING MILLS, PLANTS AND SMELTERS IN MONTROSE COUNTY

Name of Mill or Plant	Location	Operator	P. O. Address	Product
Union Carbide Nuclear Co., Uravan Plant	Uravan	Union Carbide Nuclear Co.	Uravan	Uranium, Vanadium
Vanadium Corp. of Amer- ica, Naturita Mill	Naturita	Vanadium Corp. of America	Naturita	Uranium, Vanadium

OPERATING MILLS, PLANTS AND SMELTERS IN OURAY COUNTY

Red Mountain Mill (For- merly Idarado Mill)	Ouray	Idarado Mining Co.	Ouray	Gold, Silver, Lead, Copper, Zinc
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OPERATING MILLS, PLANTS AND SMELTERS IN PUEBLO COUNTY

Mica Grinding Plant	Pueblo	International Minerals & Chemical Corp.	Pueblo	Mica
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OPERATING MILLS, PLANTS AND SMELTERS IN SAGUACHE COUNTY

Saguache Smelting Co.	Saguache	Saguache Smelting Co.	Box 246, Saguache	Gold, Silver, Copper, Lead
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OPERATING MILLS, PLANTS AND SMELTERS IN SAN JUAN COUNTY

Highland Mary Cleanup Lease	Las Animas	Dominick Franch Estate	2653 Main Ave., Durango	Gold, Silver, Lead
Lead Carbonate	Silverton	Lead Carbonate Mines, Inc.	Box 186, Silverton	Gold, Silver, Copper, Lead, Zinc
Pride Mill	Howardsville	Cameron J. Grant	Silverton	Gold, Silver, Copper, Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS IN SUMMIT COUNTY

Boss Mill	Dillon	Boss Mining Co.	194 W. Dakota Ave., Denver 23	Silver, Lead, Zinc
Burke-Martin Mill	Montezuma	Burke-Martin Mines, Inc.	Montezuma	Silver, Lead, Zinc

OPERATING MILLS, PLANTS AND SMELTERS IN TELLER COUNTY

Carlton Mill	Victor	Golden Cycle Corp.	Box 47, Victor	Gold, Silver
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OPERATING PLACERS IN BOULDER COUNTY

Name of Placer	Location	Operator	P. O. Address	Product
Dee Harrington	Nederland	Dee Harrington, et al.	Nederland	Ferberite

OPERATING PLACERS IN JACKSON COUNTY

Name of Placer	Location	Operator	P. O. Address	Product
Black Bunny	Pass, Black Bunny Mining Co.,Steamboat SpringsManganese
ColumbiaTennessee	Creek, Gold Leaf Mining & Dredging Co.,	Box 294, Buena VistaGold, Silver

OPERATING PLACERS IN LAKE COUNTY

C & B LeaseGalena Gulch	Alex BordonBox 43, BreckenridgeSilver, Lead
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OPERATING PLACERS IN SUMMIT COUNTY

ROAD WORK, TUNNELS AND DAMS—1955

Name of Operation	Location	Operator	P. O. Address	Project
Highway	Peter Kiewit & Sons' Co.,	1950 S. Colorado Blvd., Denver 22Highway

ADAMS COUNTY

Highway	Peter Kiewit & Sons' Co.,	1950 S. Colorado Blvd., Denver 22Highway
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ARAPAHOE COUNTY

Isbell Construction Co.,	Grand Valley	Isbell Construction Co.,	Box 447, Grand ValleyConstruction
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GARFIELD COUNTY

PowderhornPowderhorn	Minerals Engineering Co.,	801 Fourth Ave., Grand JunctionTunnel
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GUNNISON COUNTY

Highway	Peter Kiewit & Sons' Co.,	1950 S. Colorado Blvd., Denver 22Highway
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LA PLATA COUNTY

Highway	Peter Kiewit & Sons' Co.,	1950 S. Colorado Blvd., Denver 22Highway
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MOFFAT COUNTY

Highway	Peter Kiewit & Sons' Co.,	1950 S. Colorado Blvd., Denver 22Highway Tunnel
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MONTEZUMA COUNTY

1-F TunnelEntrance Mesa Verde Natl. Park	Colorado Constructors, Inc.,	725 W. 39th Ave., Denver 16Highway Tunnel
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ROAD WORK, TUNNELS AND DAMS—1955—Continued

Name of Operation	Location	Operator	P. O. Address	Project
MONTROSE COUNTY				
Highway No. 141	Uravan	Inland Construction Co.	Box 877, Uravan	Highway
PARK COUNTY				
Blue River Tunnel	Grant	City & County of Denver, Board of Water Commissioners	City & County Bldg., Denver 2	Water Diversion Tunnel
Montgomery Dam	Montgomery Gulch	Fisher Contracting Co.	Alma	Dam
SAN MIGUEL COUNTY				
Saltillo Dam Site	Placerville	U. S. Dept. of the Interior, Bureau of Reclamation	Box 640, Durango	Development
SUMMIT COUNTY				
Quandary Tunnel	Hoosier Pass	Stolte, Inc.	Fairplay	Water Diversion Tunnel
YUMA COUNTY				
Highway		Peter Klewit & Sons' Co.	1950 S. Colorado Blvd., Denver 22	Highway

CORE AND WAGON DRILLING OPERATIONS

L. H. Mott & Sons, Inc.	Box 830, Eighth Ave., Huntington, W. Va.	Colorado Plateau
Betzer Diamond Drill Co.	550 Ute St., Grand Junction	Colorado Plateau
Boyle Bros. Diamond Drilling Co.	1321 S. Main St., Salt Lake City, Utah	Colorado Plateau
Dan Kelly Drilling Co.	Grand Junction	Colorado Plateau
Franklin & Cowan Drilling Co.	Ozona, Texas	Colorado Plateau
Johnson & Youvan	Naturita	Colorado Plateau
Joy Mfg. & Contracting Co.	Cortez, Grand Junction	Colorado Plateau
Lippoth & Wein Drilling Co.	Box 956	Colorado Plateau
MachTherson Drilling Co.	Box 502	Colorado Plateau
Magie U. Drilling Co.	Box 447, Montrose	Colorado Plateau
Minerals Engineering Co.	Box 551, Moab, Utah	Colorado Plateau
Southern Geophysical Co.	Box 1351, Grand Junction	Colorado Plateau
Sprague & Henwood, Inc.	Box 1398, Grand Junction	Colorado Plateau
Urado Uranium Corp.	Box 645, Grand Junction	Colorado Plateau
	304 Main St., Grand Junction	Colorado Plateau

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